

**6285138**

**F I G. 1**

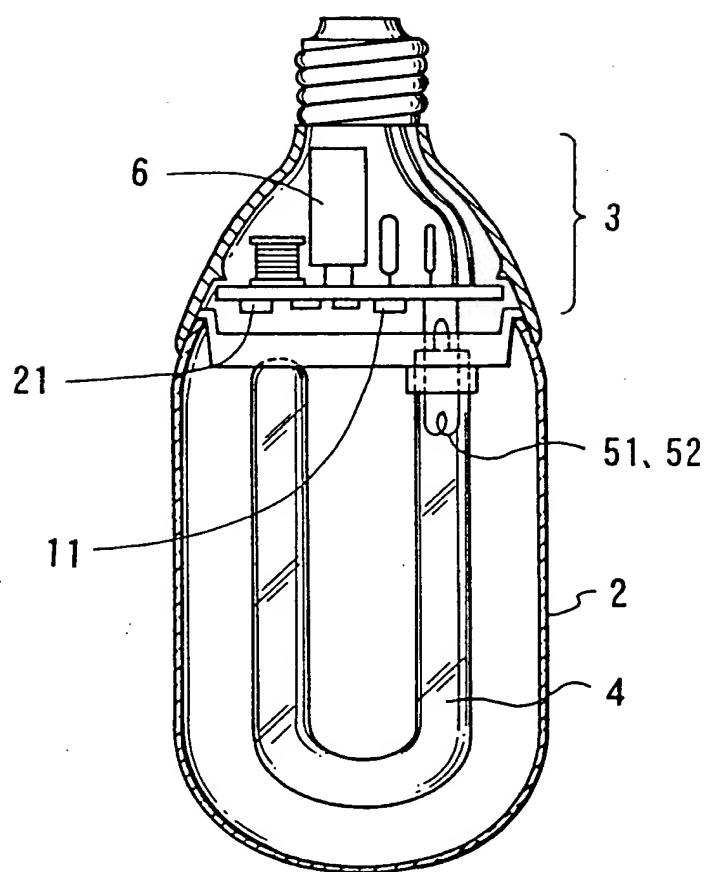


FIG. 2

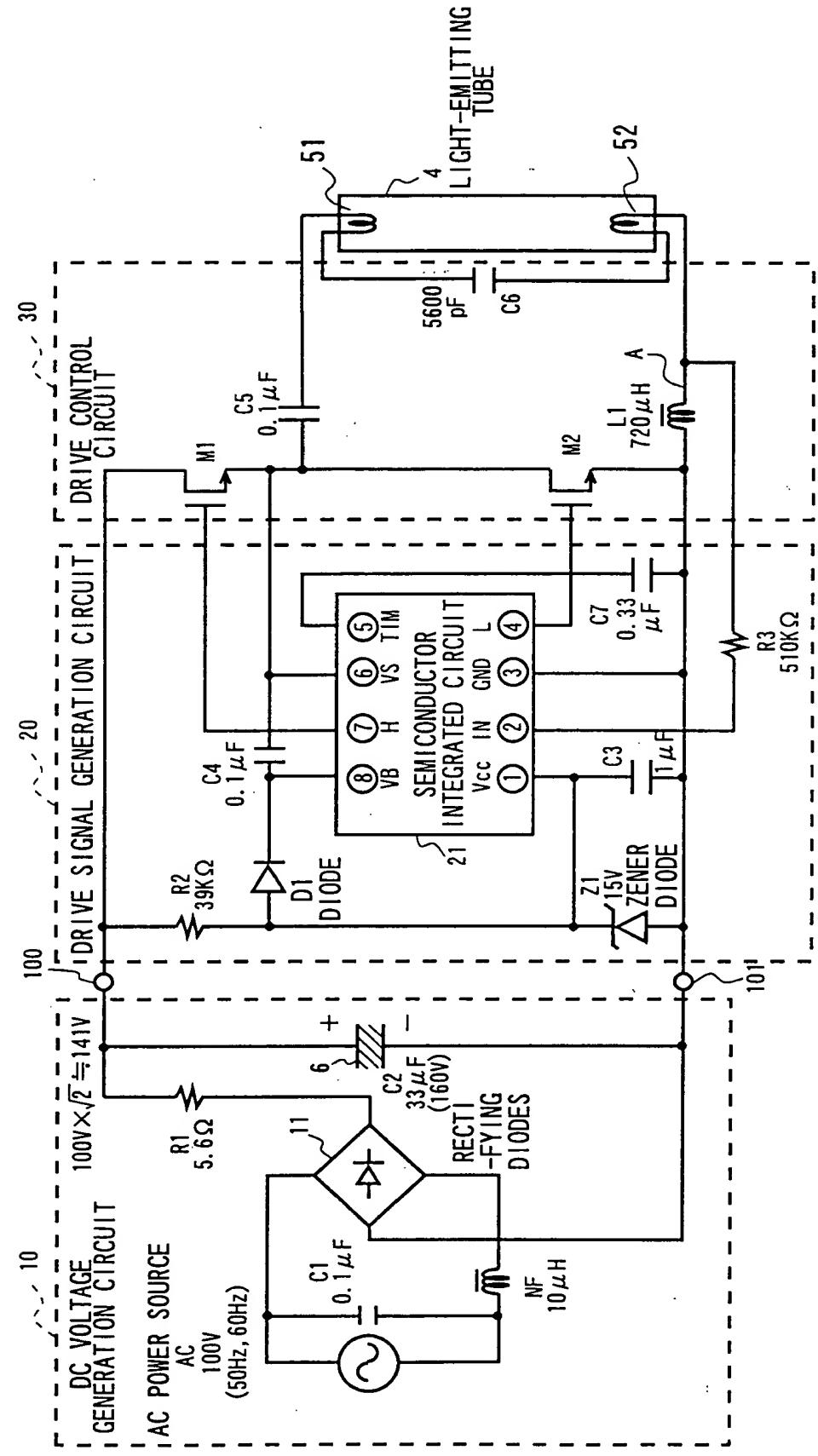
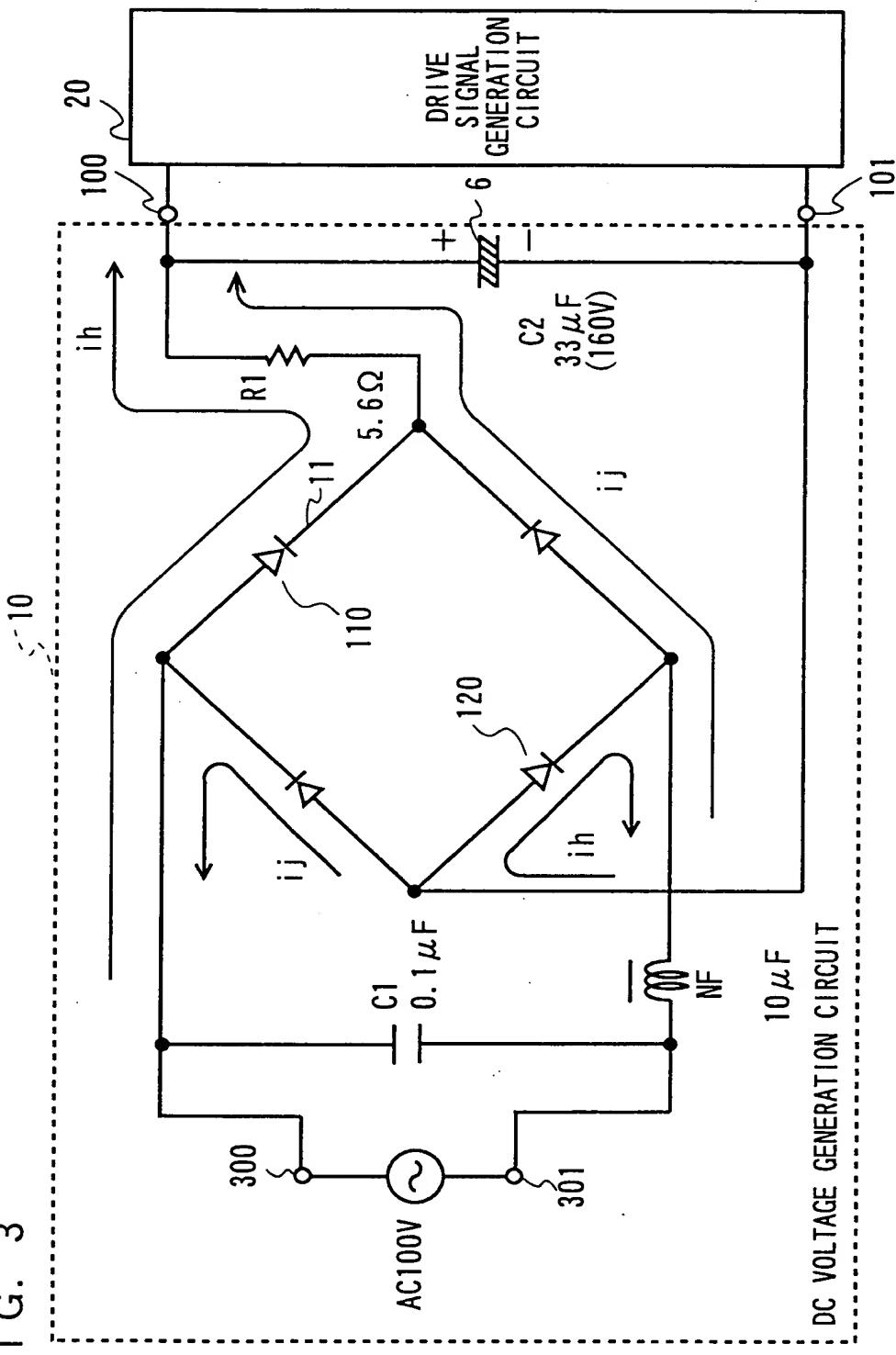
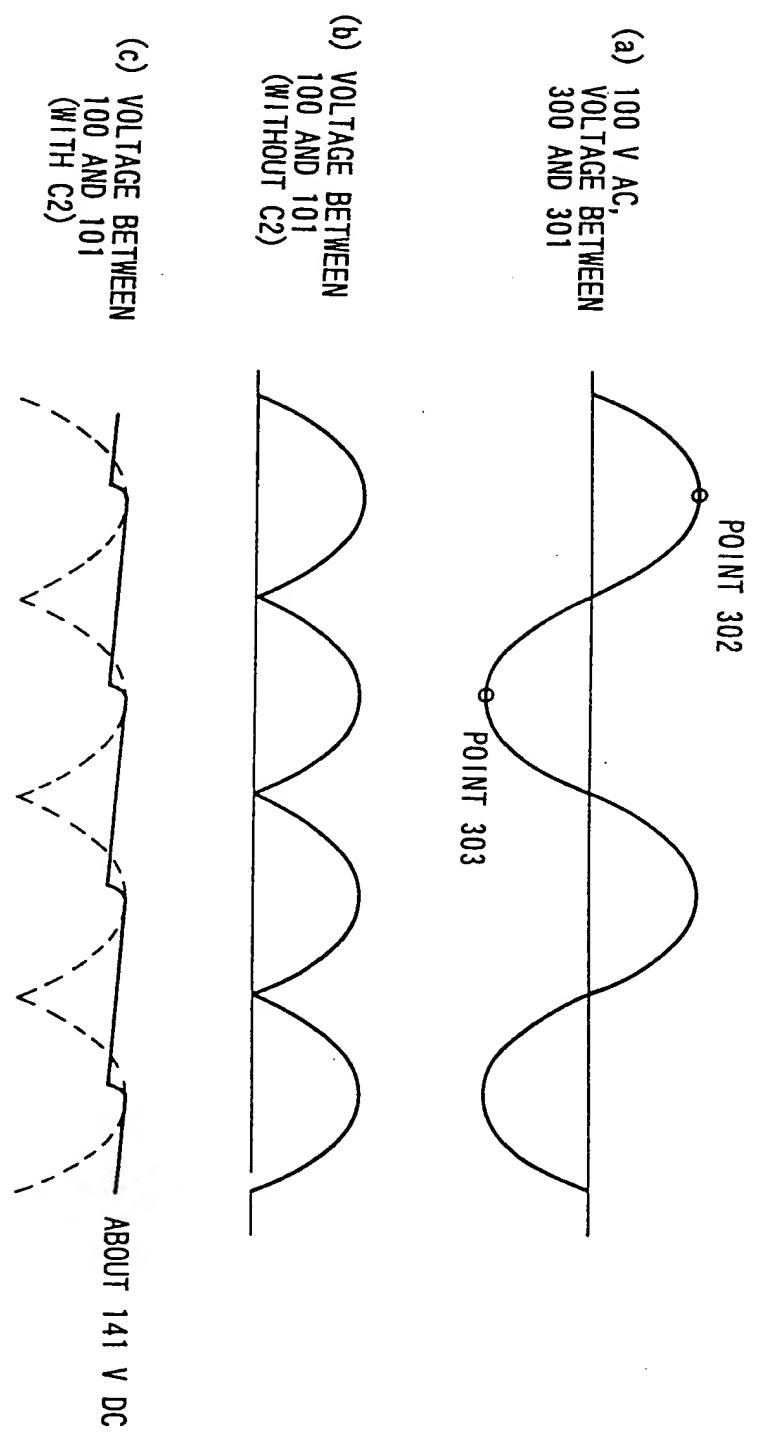


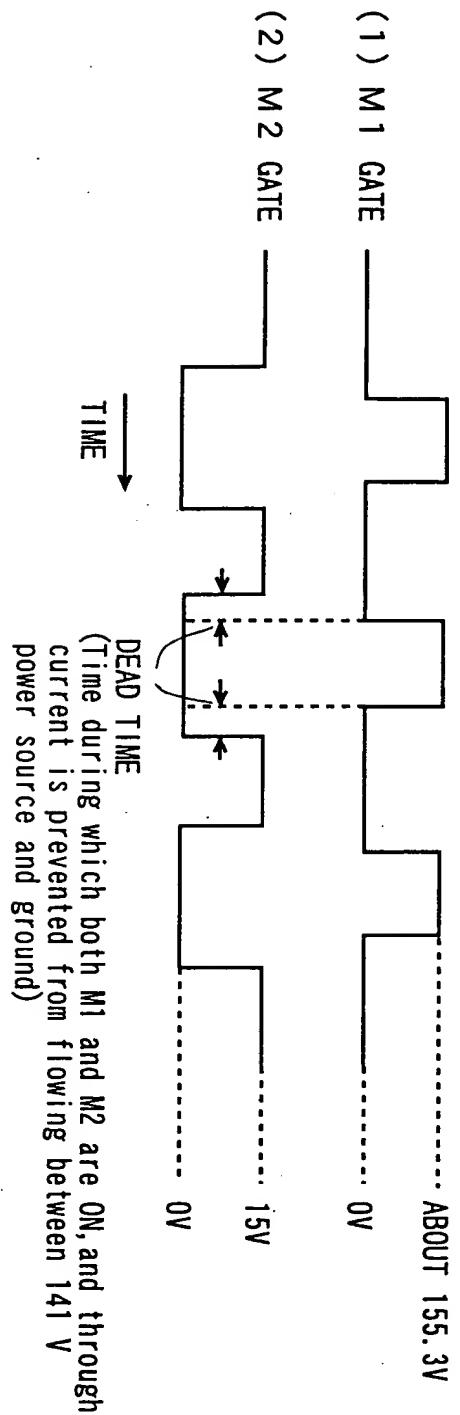
FIG. 3



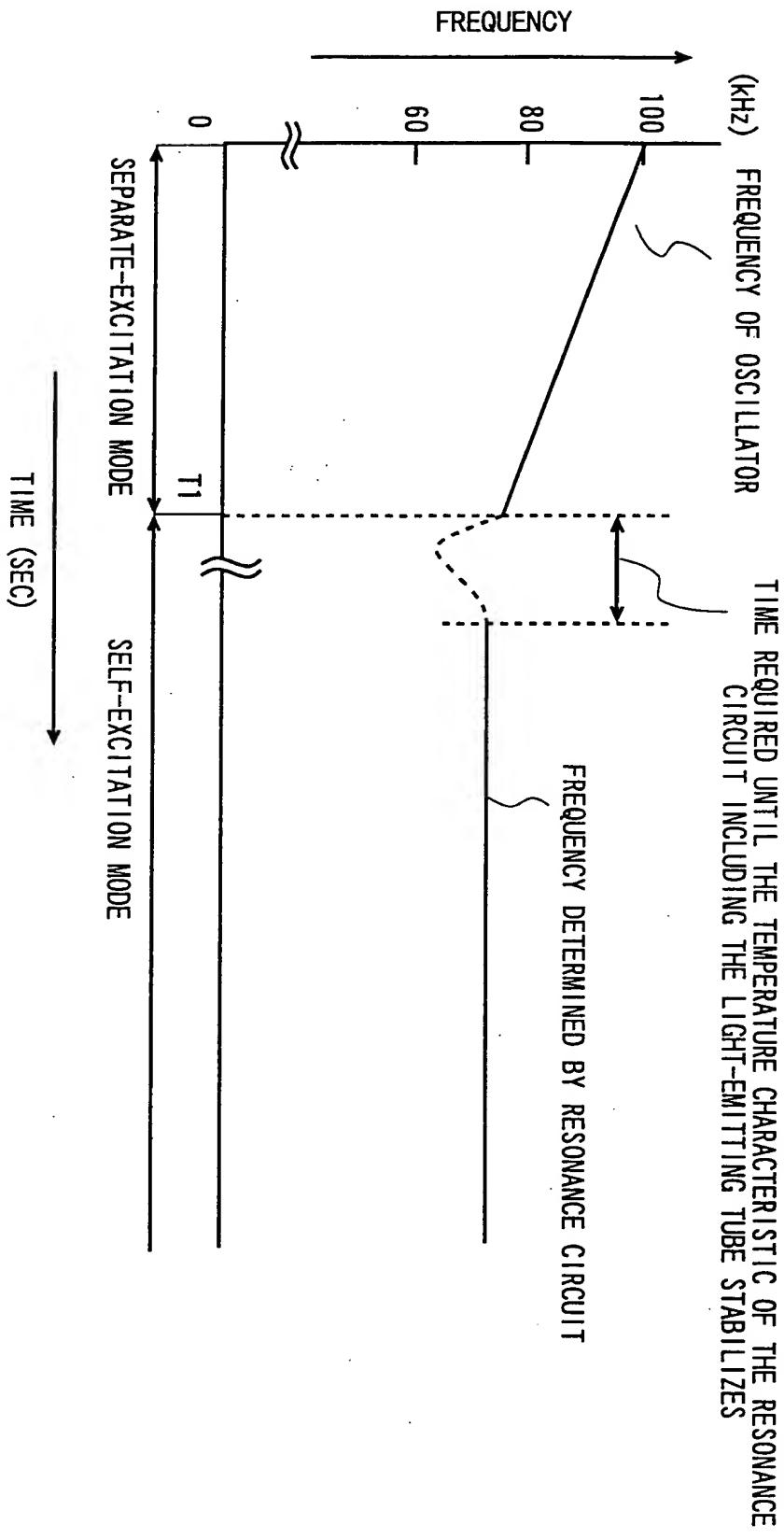
F I G. 4



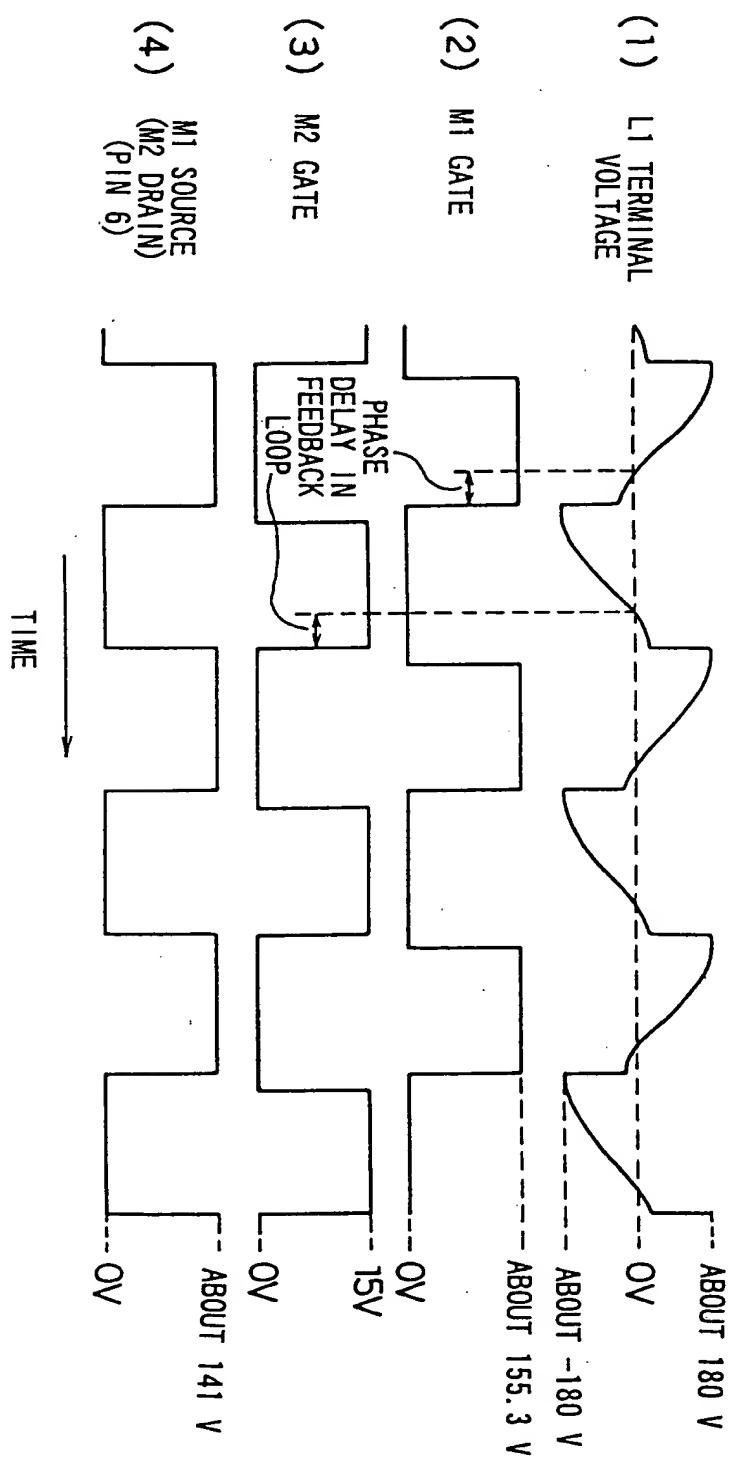
F I G. 5



F I G. 6



F I G. 7



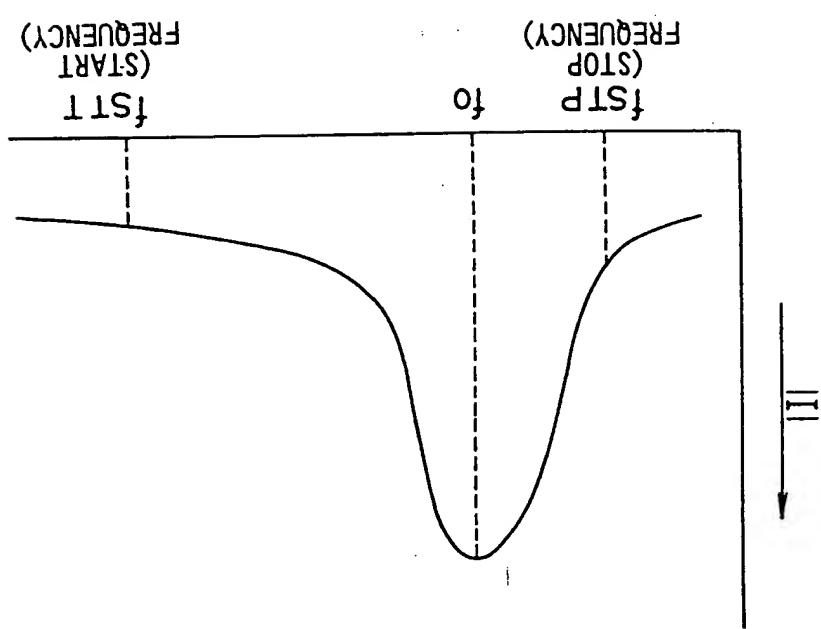
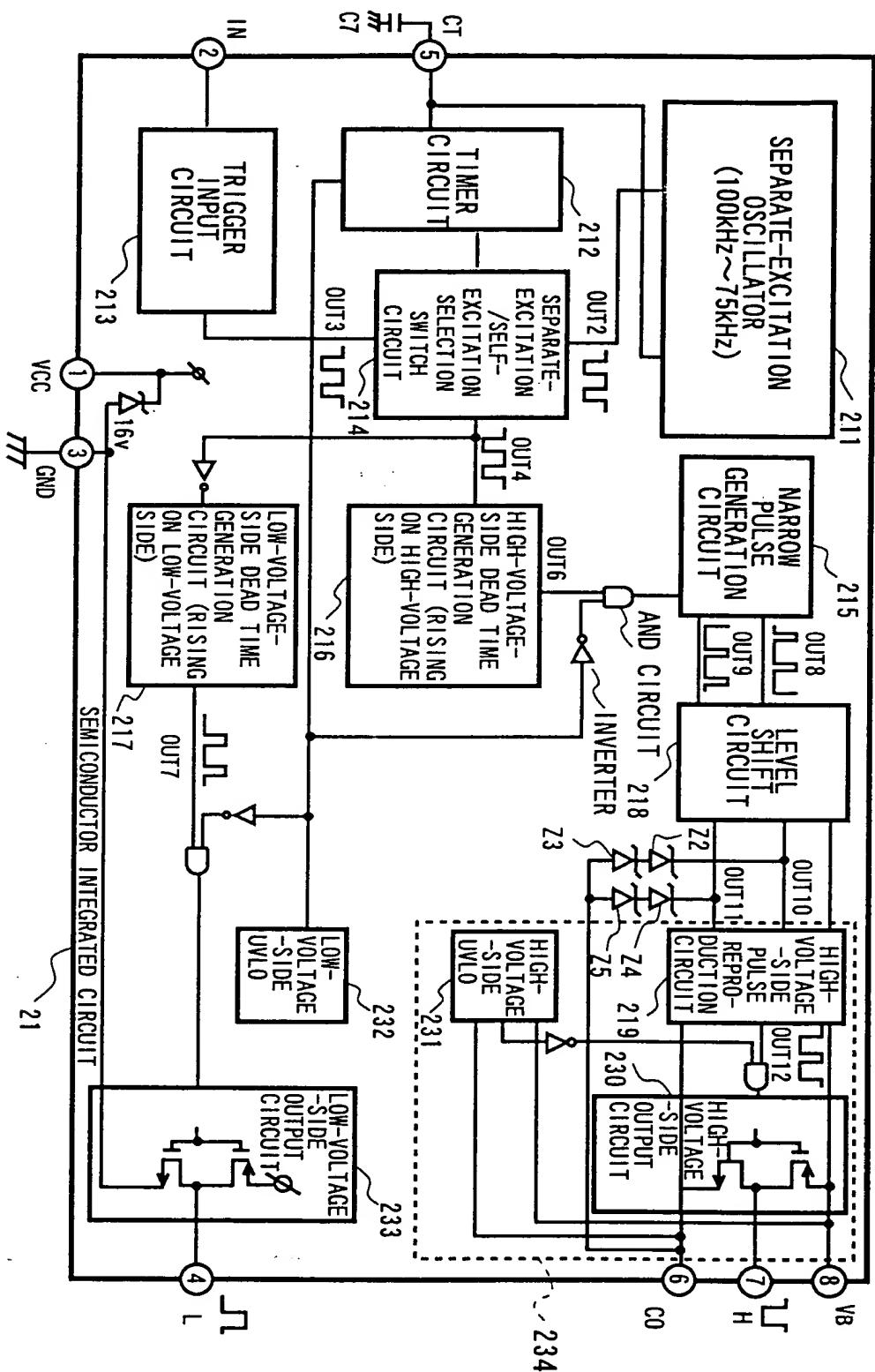


FIG. 8

F I G. 9

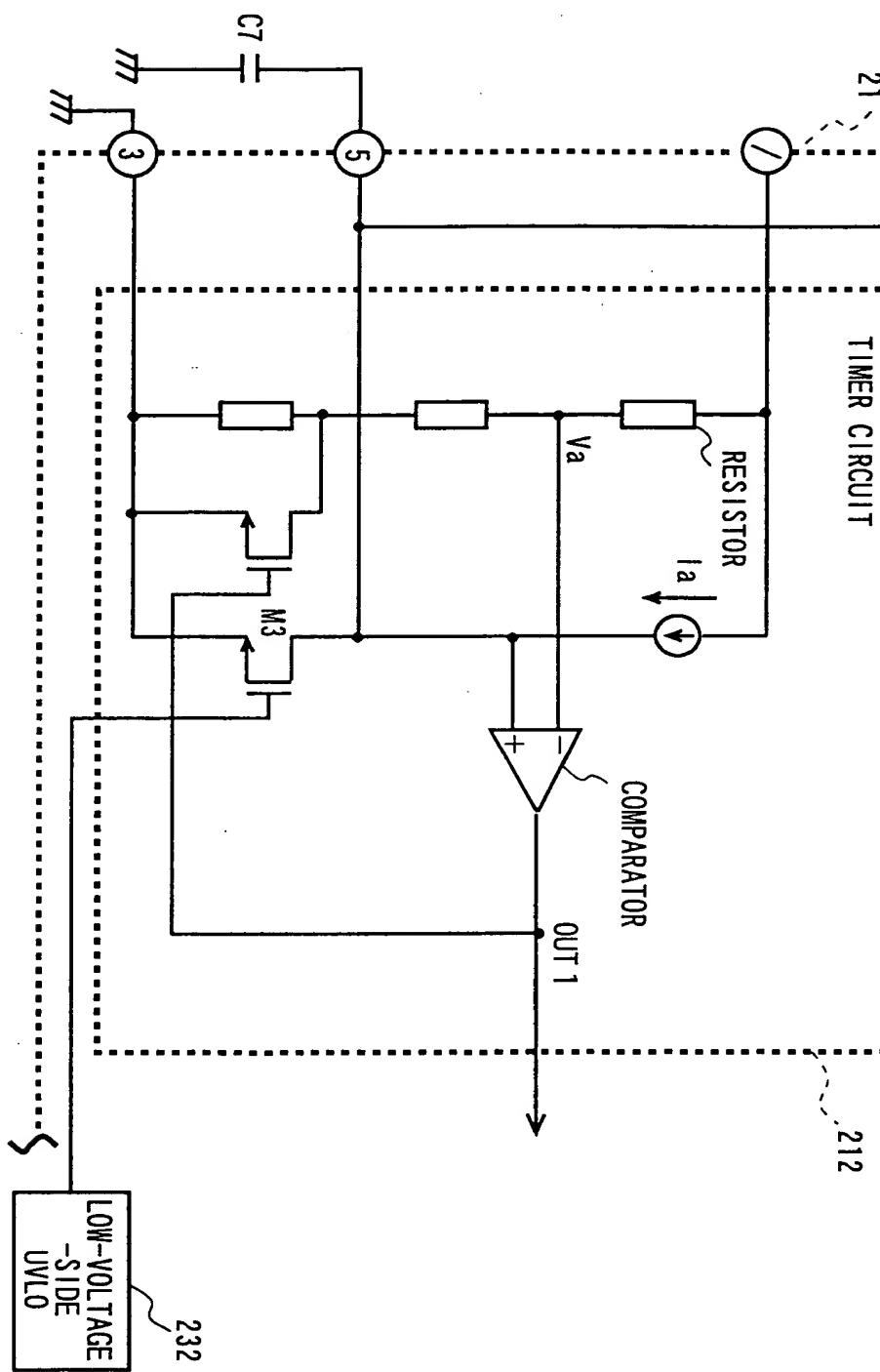


F I G. 10

SEMICONDUCTOR INTEGRATED CIRCUIT

21  
212  
212

TIMER CIRCUIT



F I G. 11

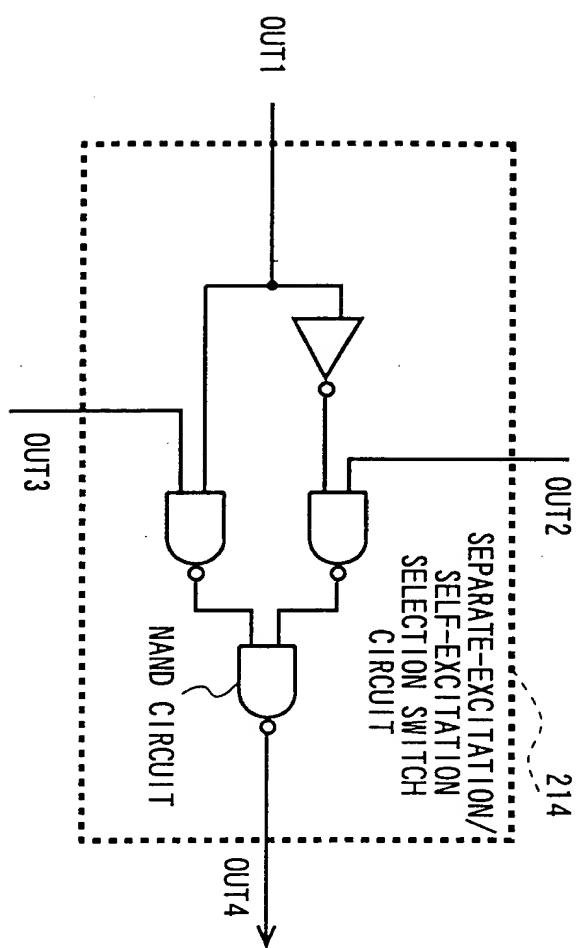
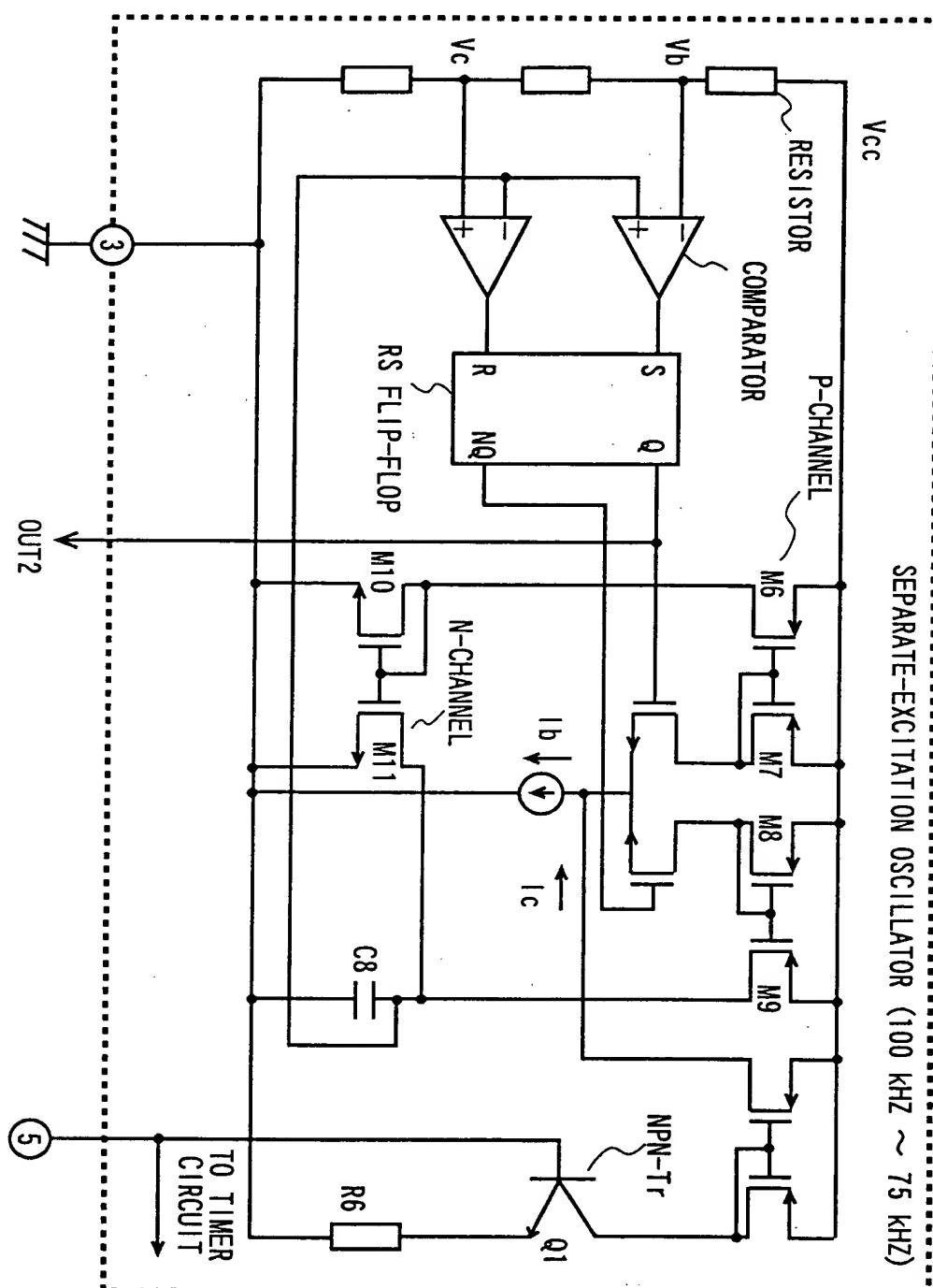


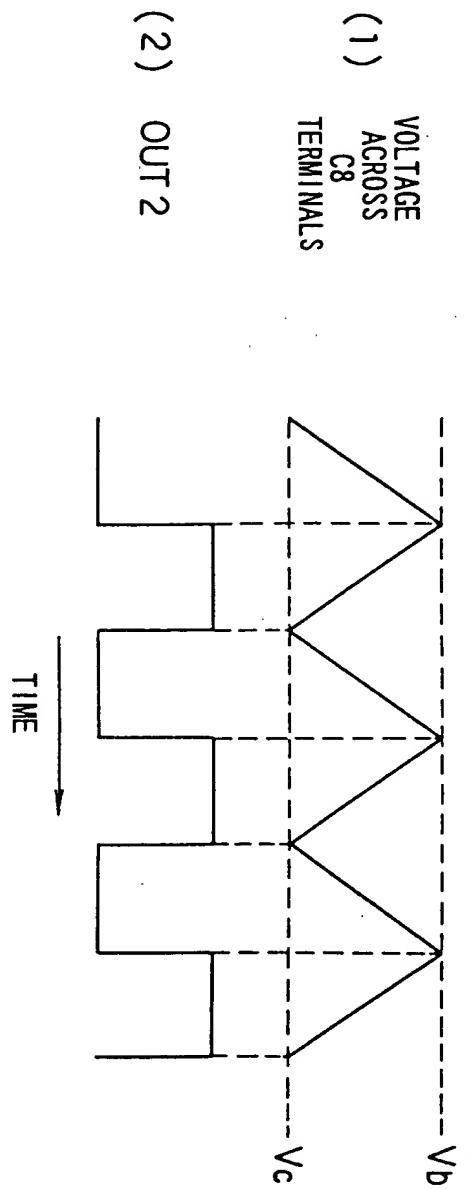
FIG. 12

211

## SEPARATE-EXCITATION OSCILLATOR (100 kHz ~ 75 kHz)

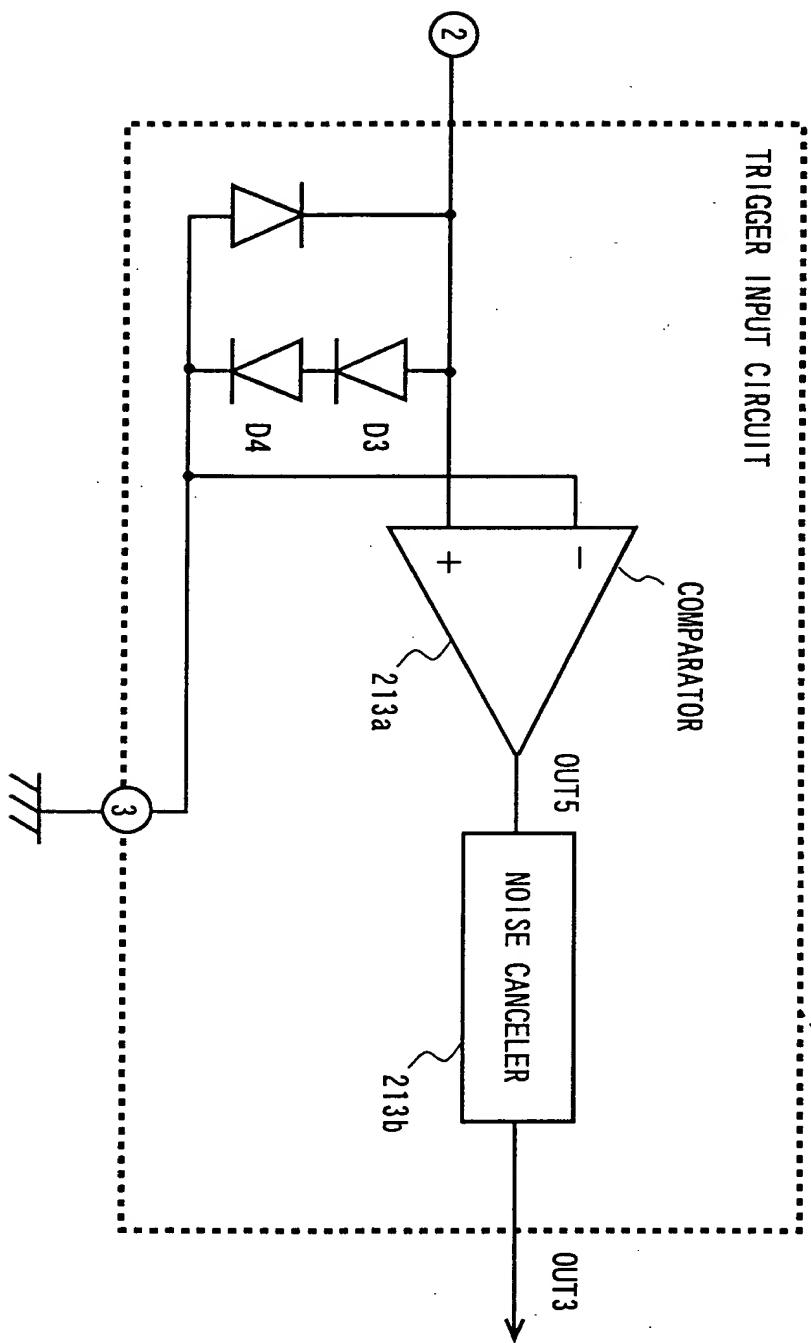


F I G. 13

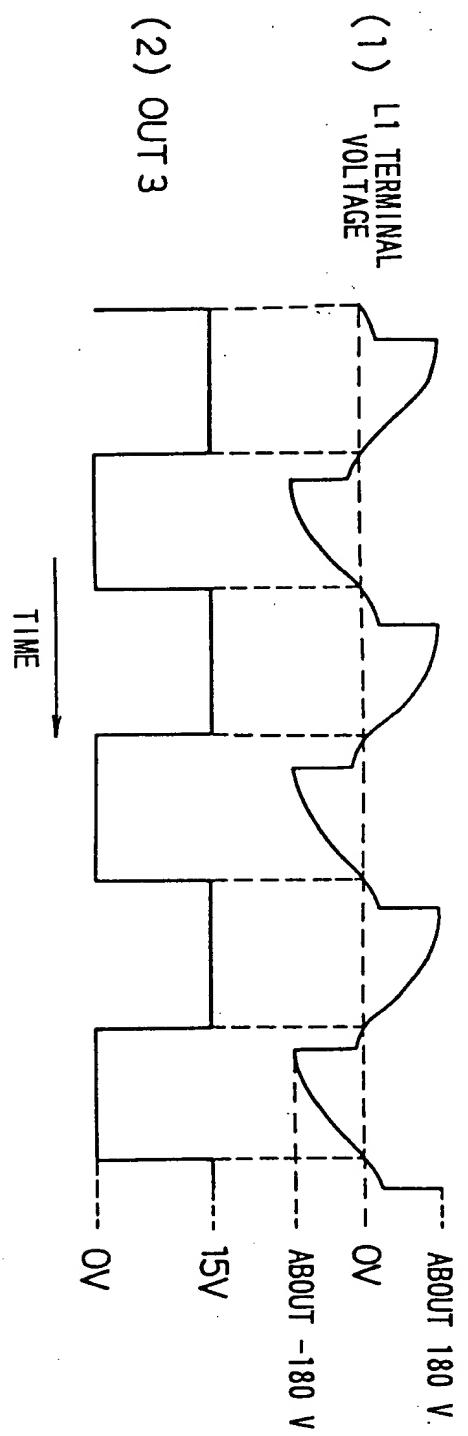


F I G. 14

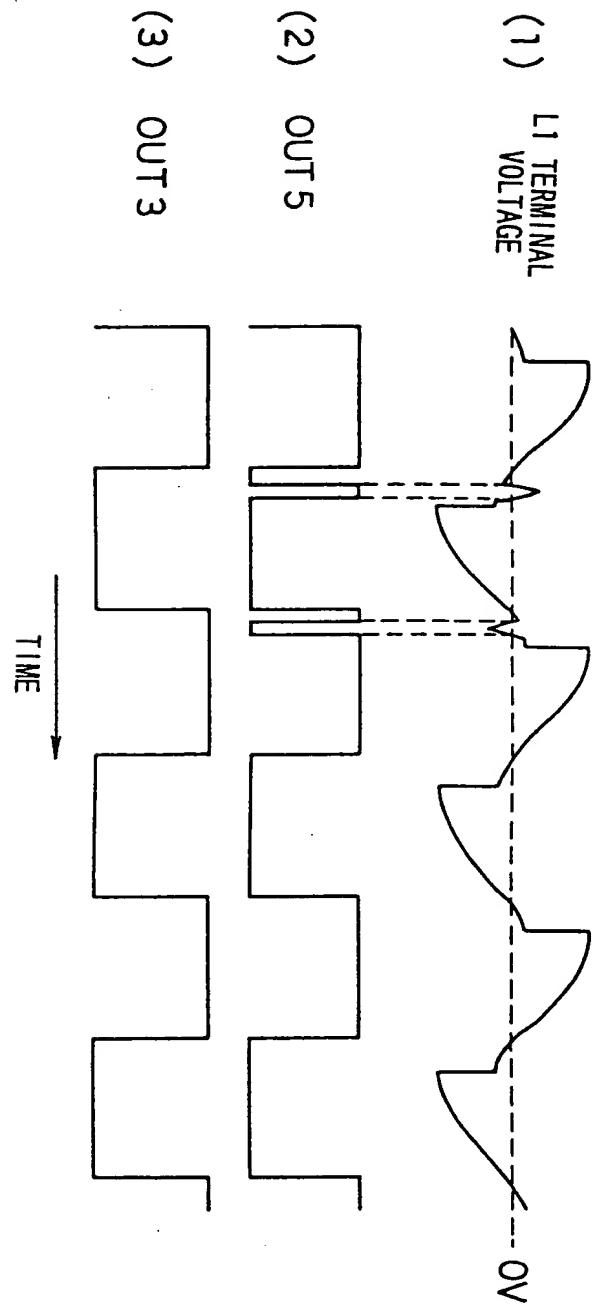
213



F I G. 15



F I G. 1 6



F | G. 17

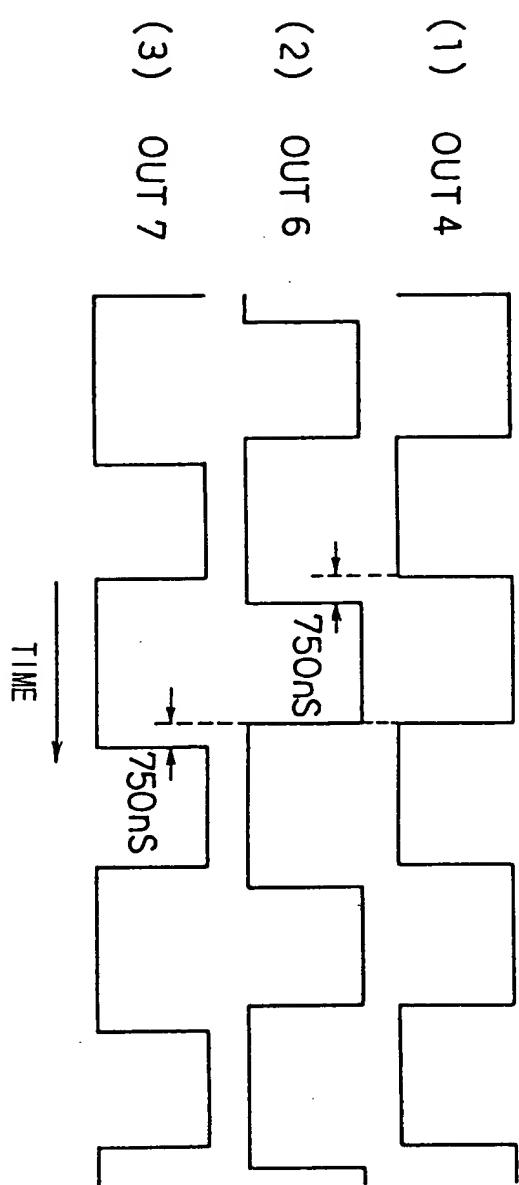


FIG. 18

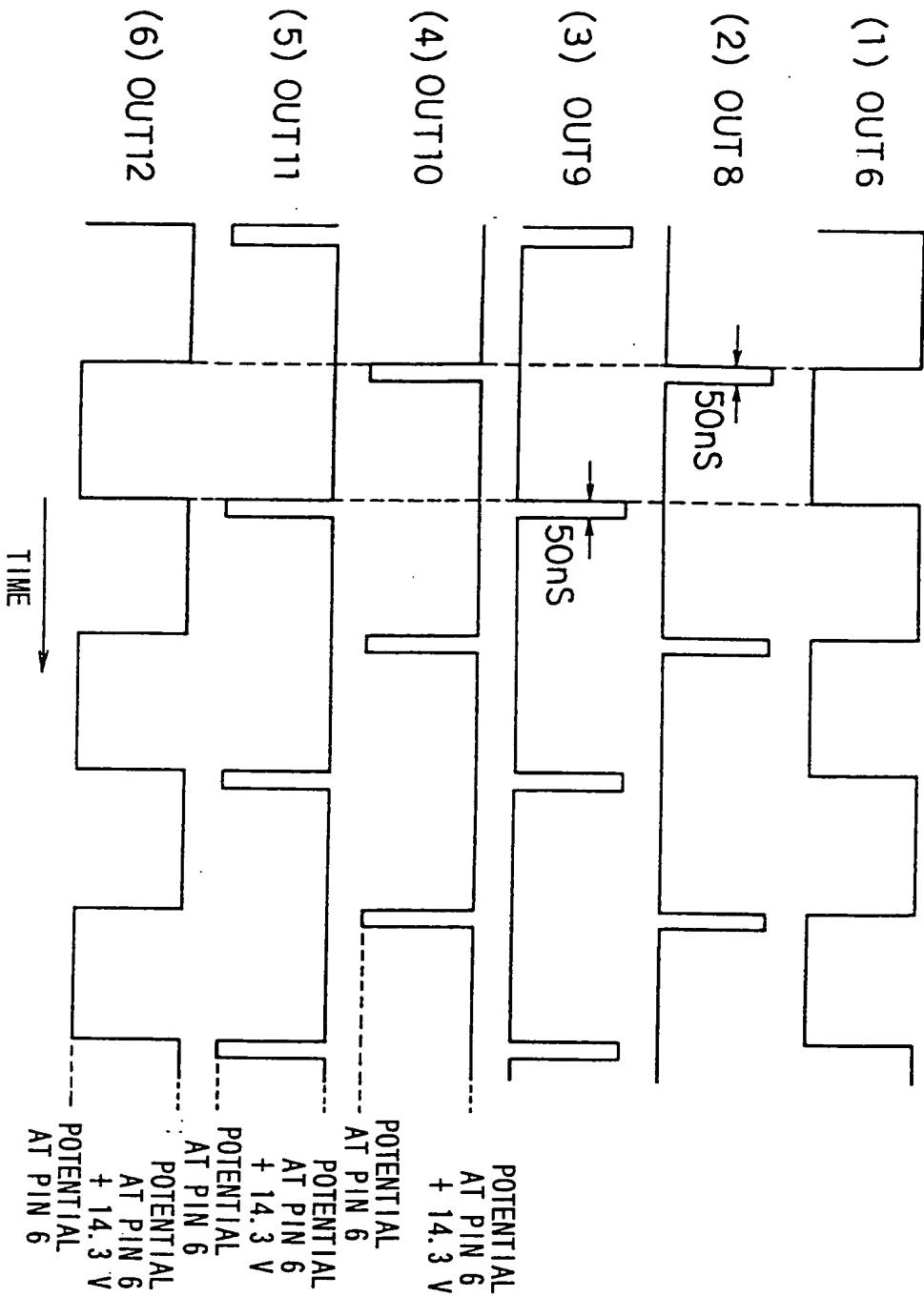
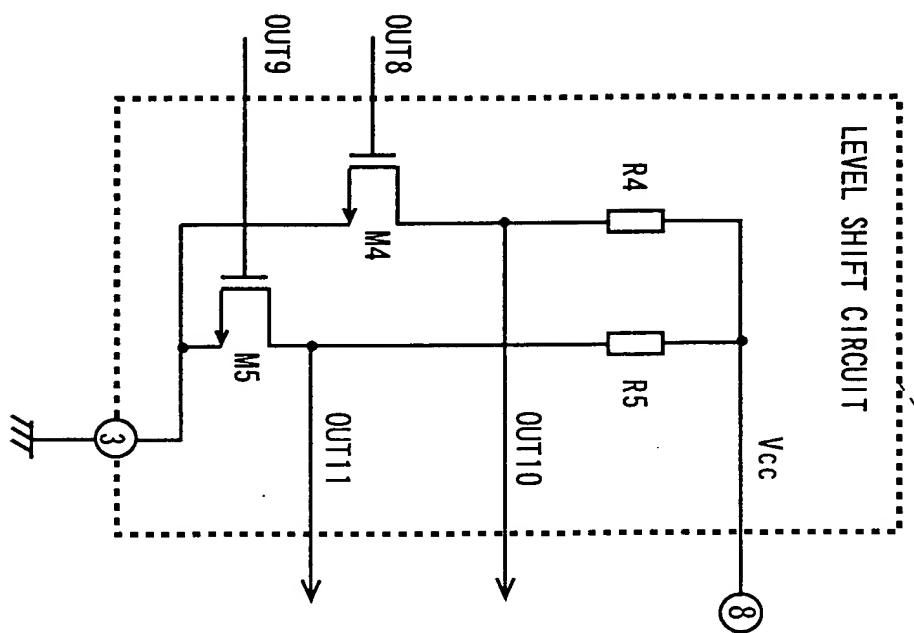


FIG. 19

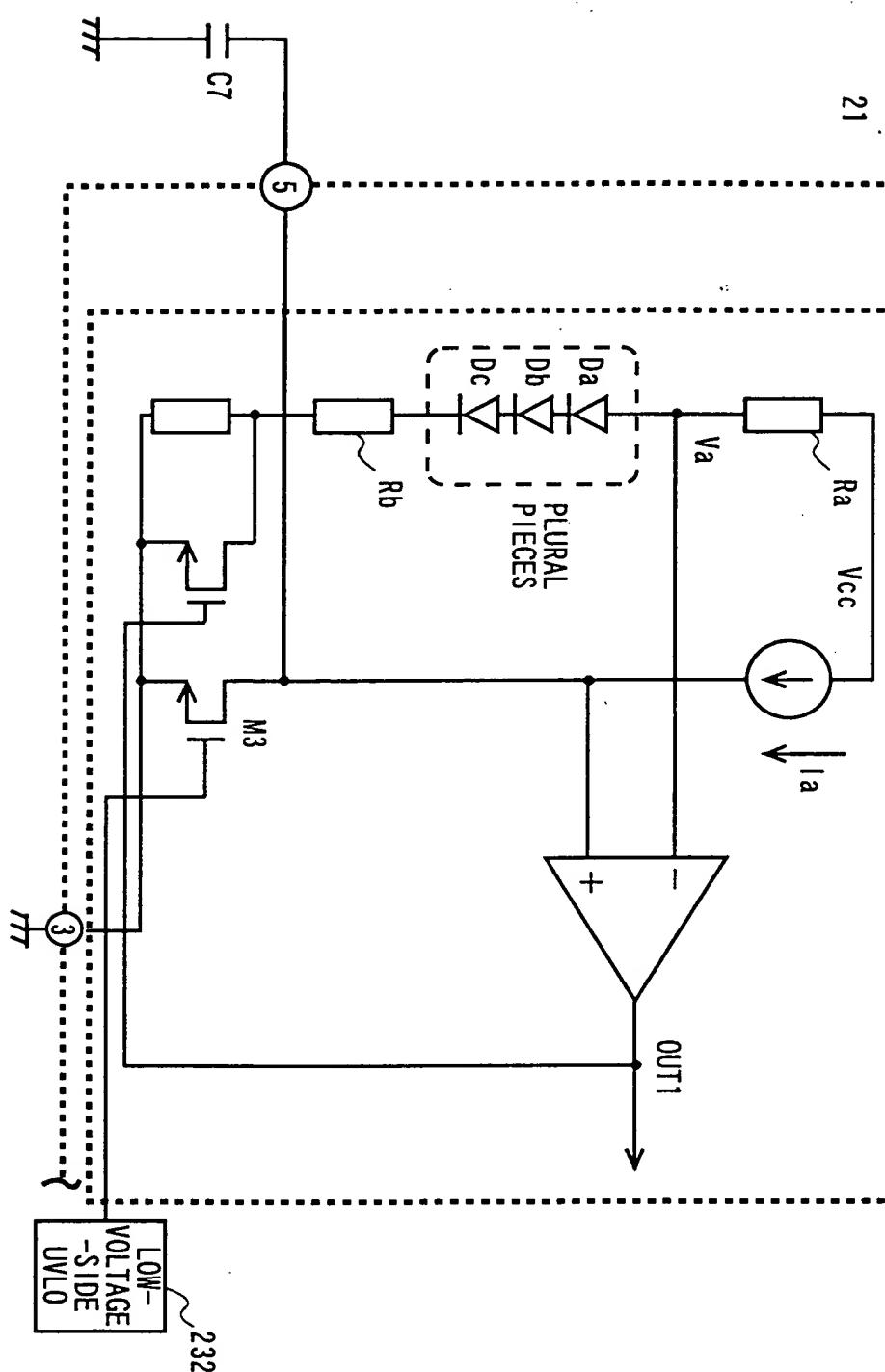
218



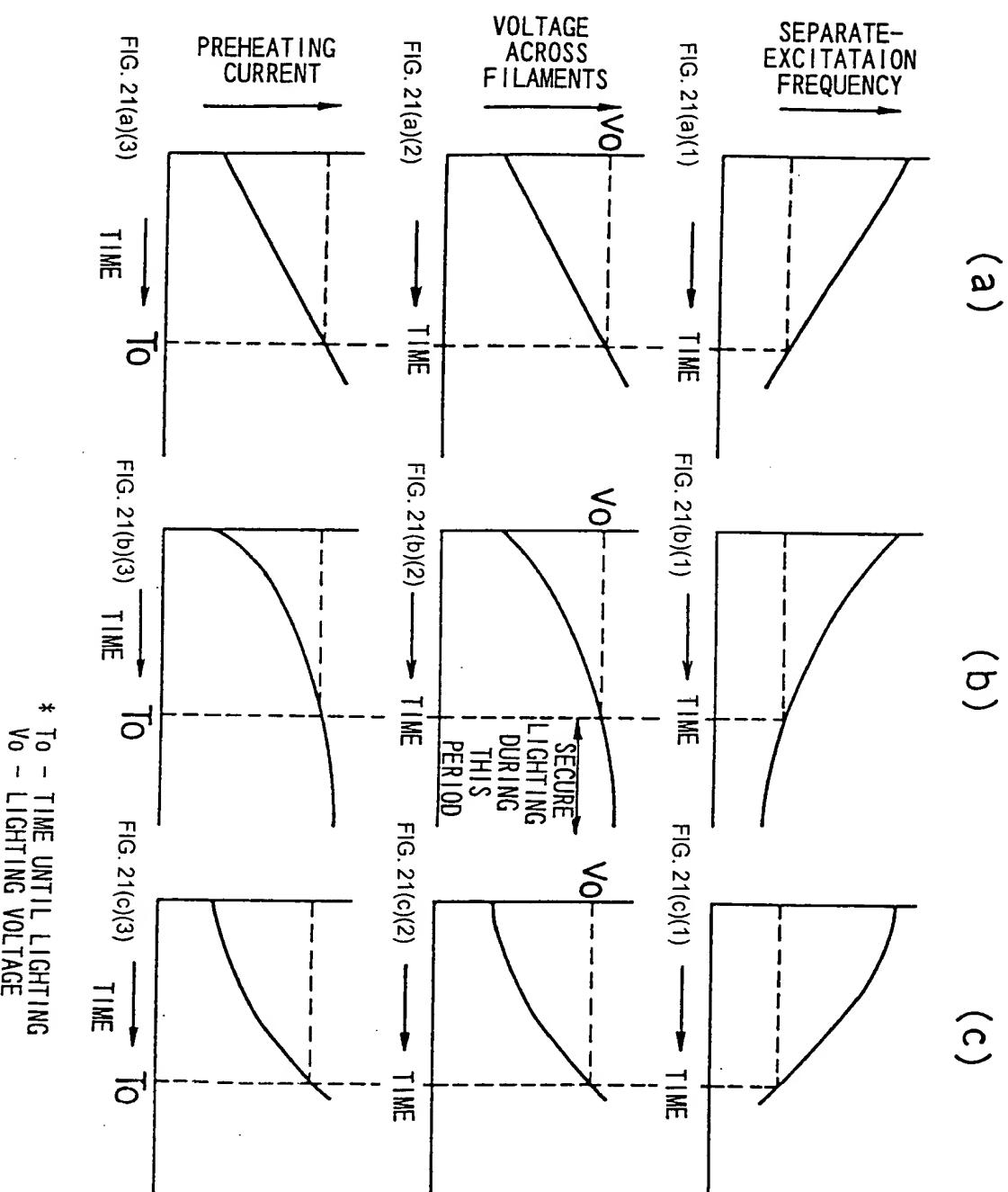
F I G. 20

SEMICONDUCTOR INTEGRATED CIRCUIT

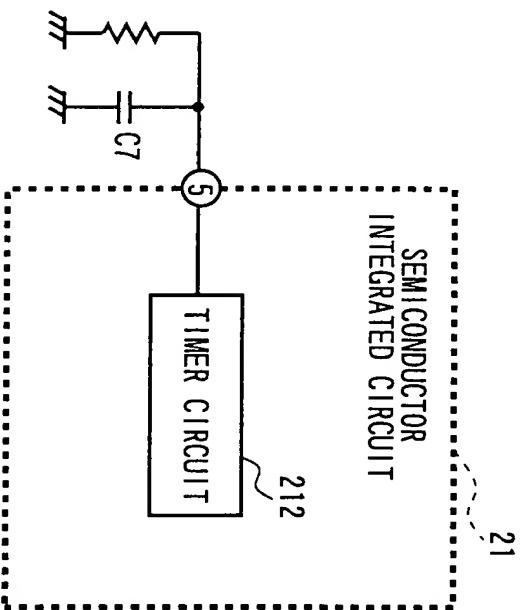
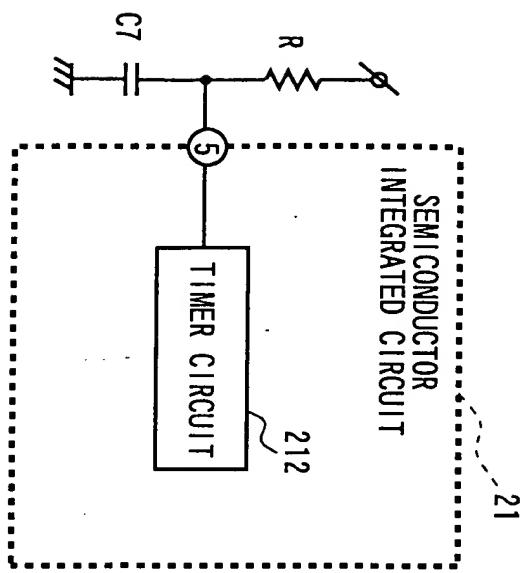
212a



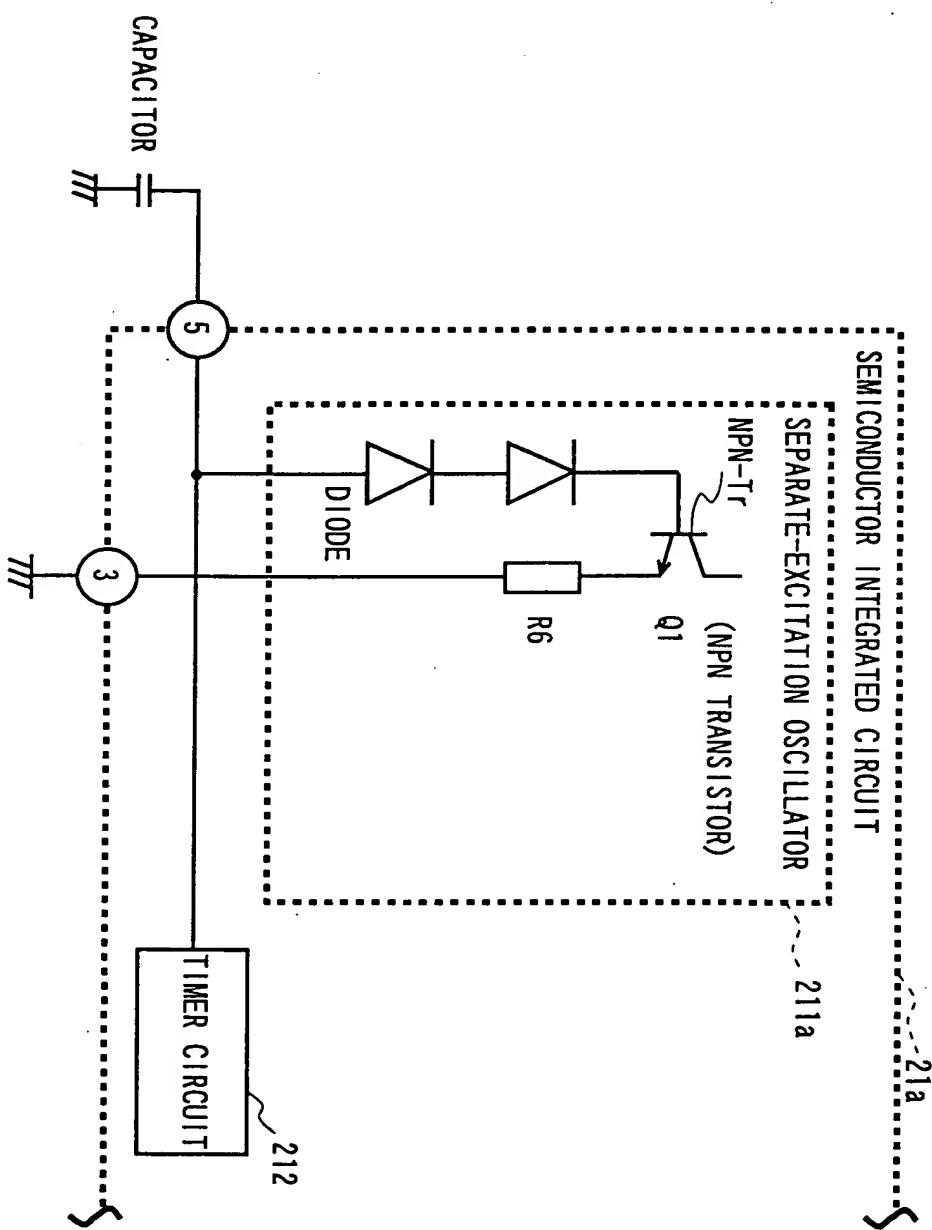
F I G. 21



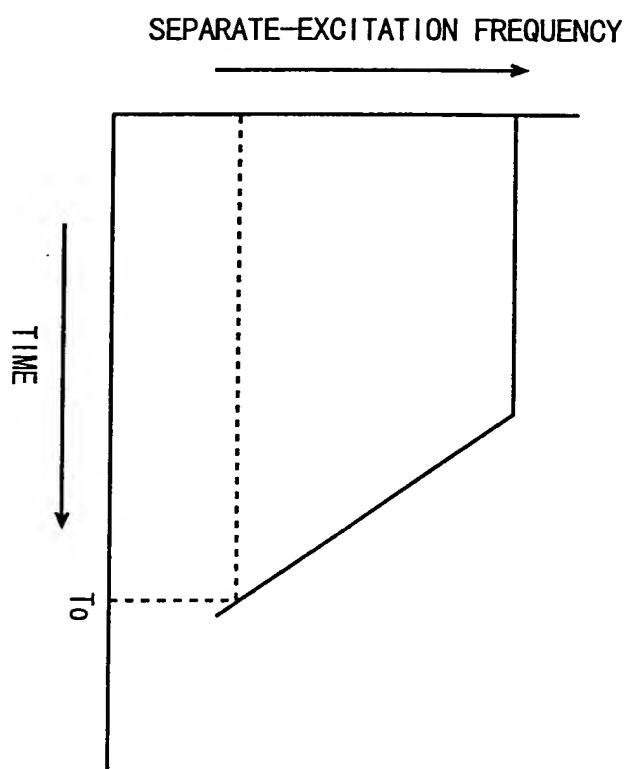
F I G. 22



F I G. 23



F I G. 24



F I G. 25

211b

SEPARATE-EXCITATION OSCILLATOR

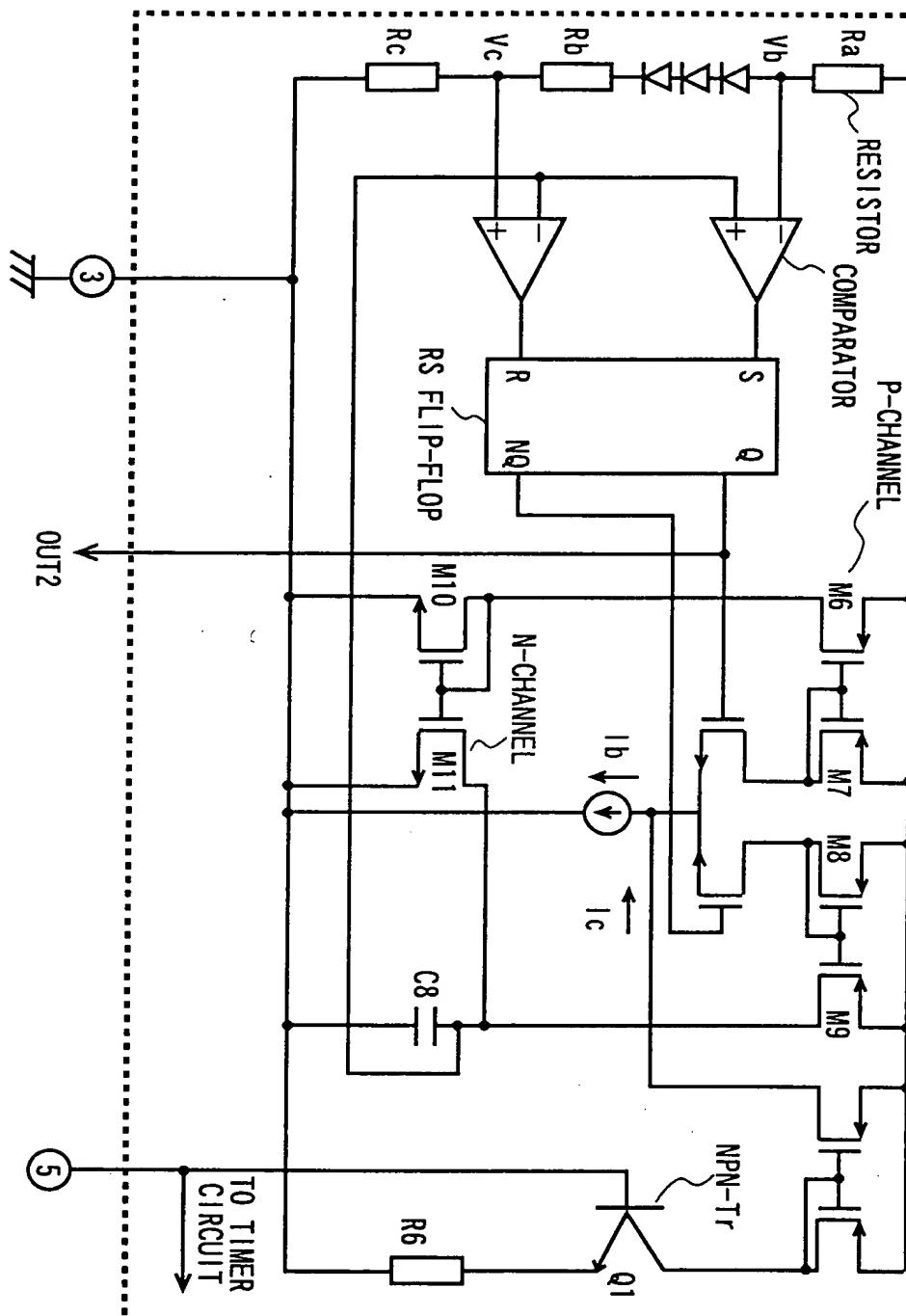


FIG. 26

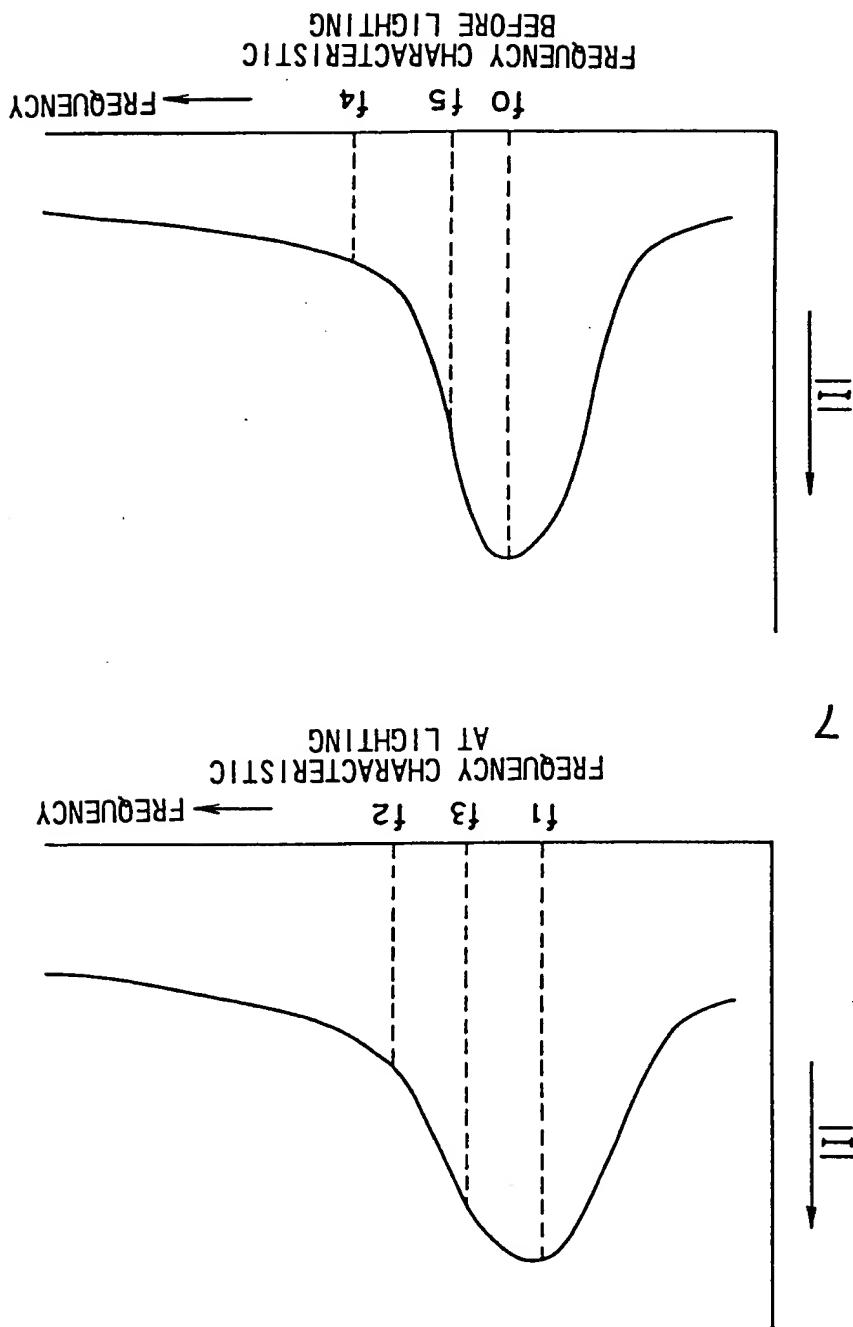
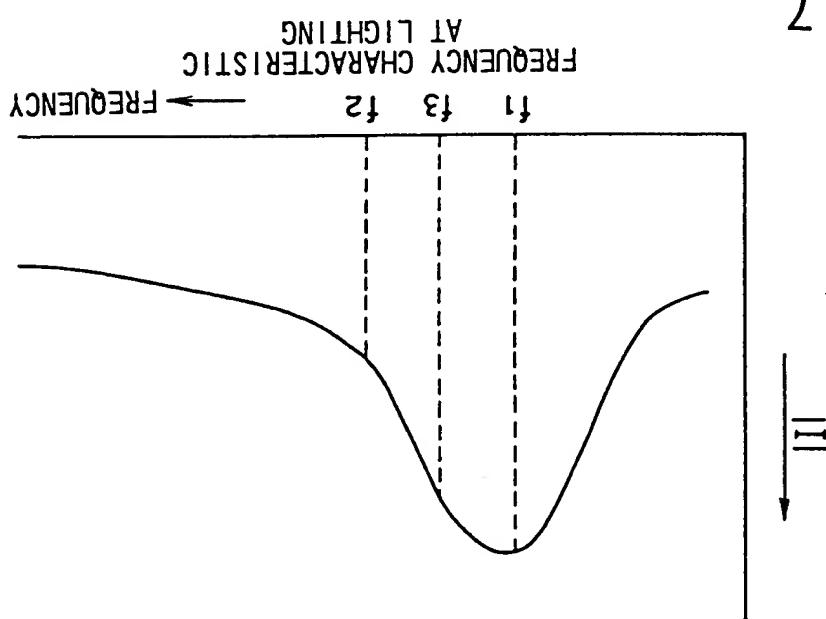
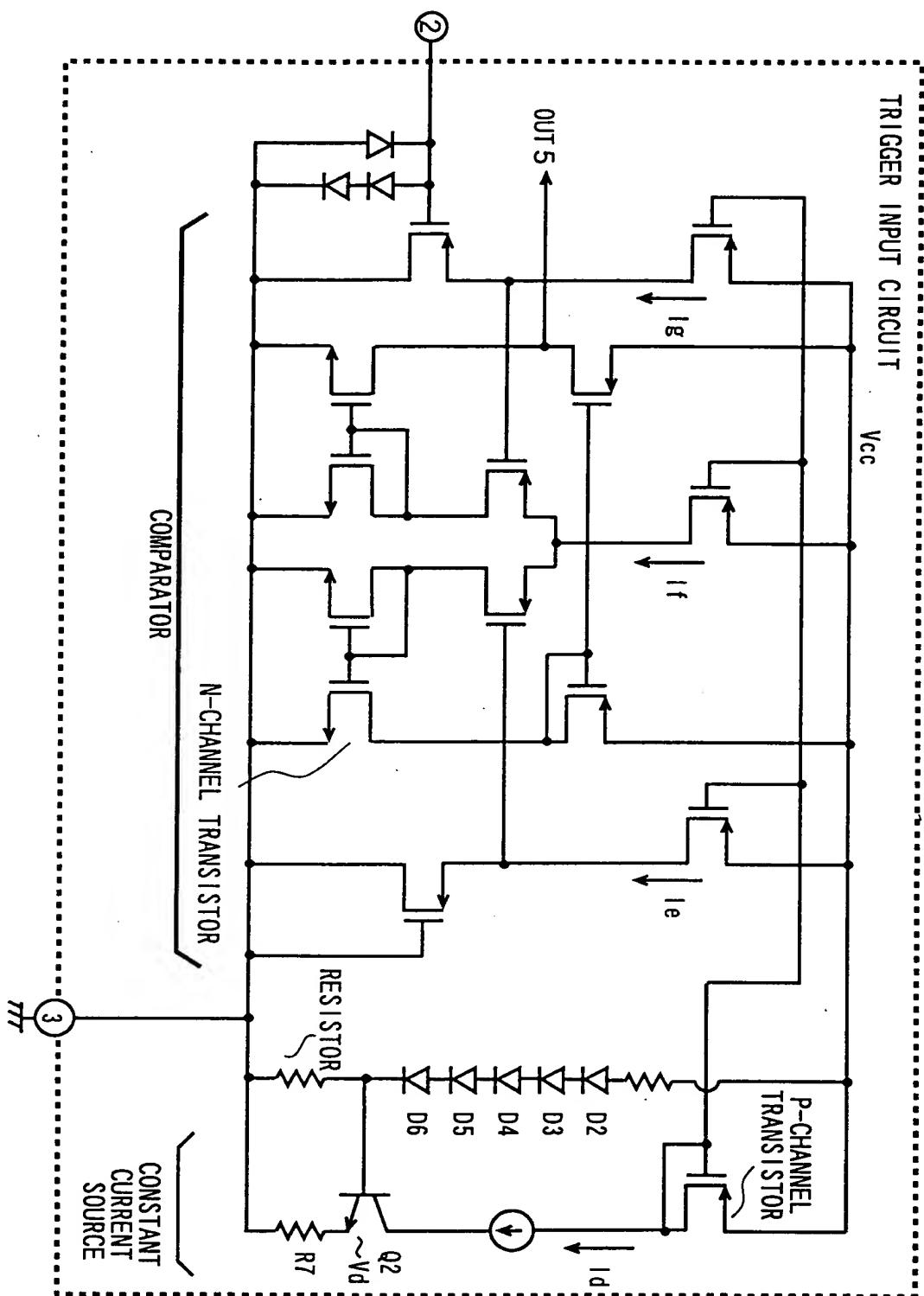


FIG. 27

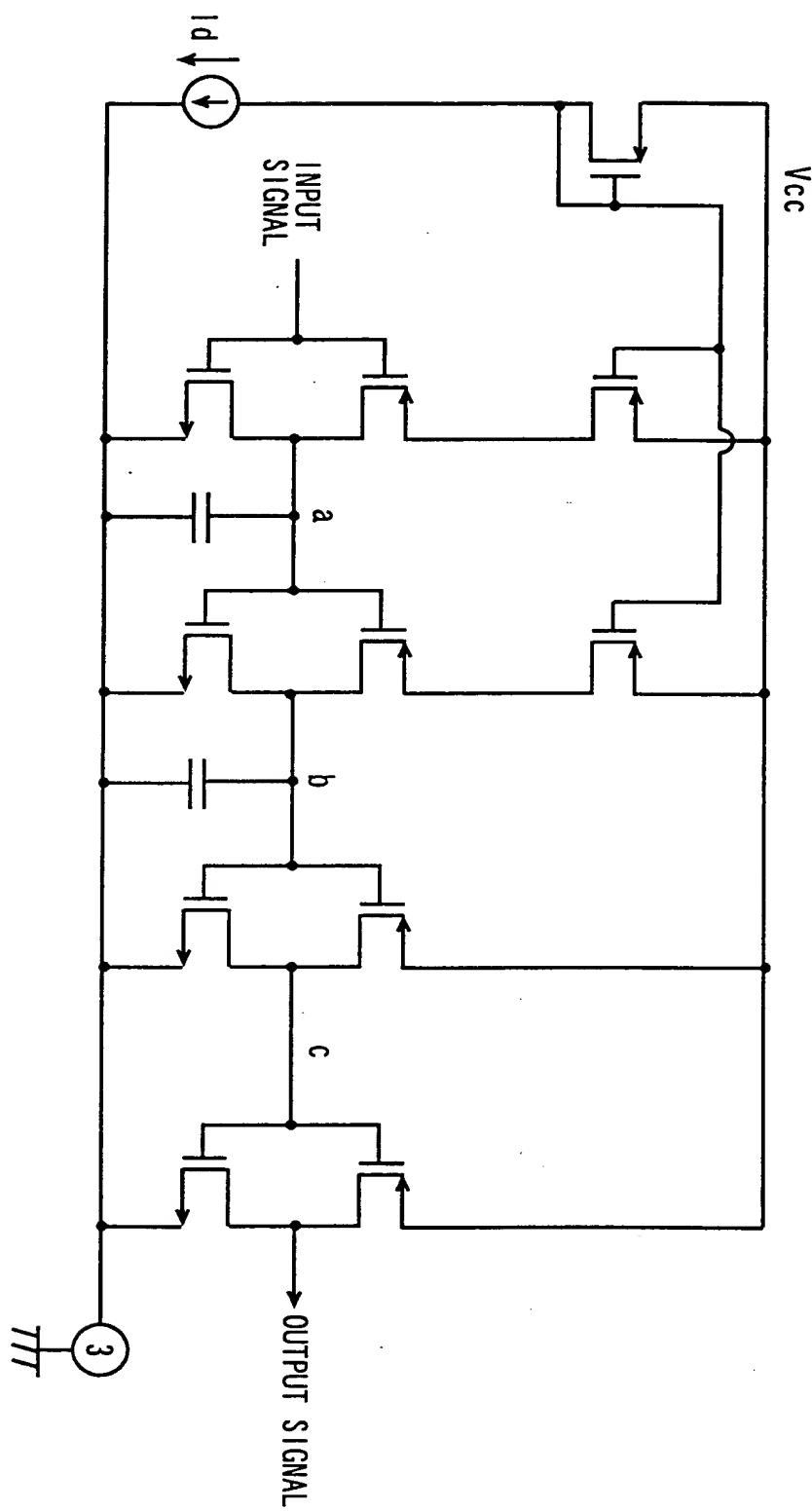


F I G. 2 8

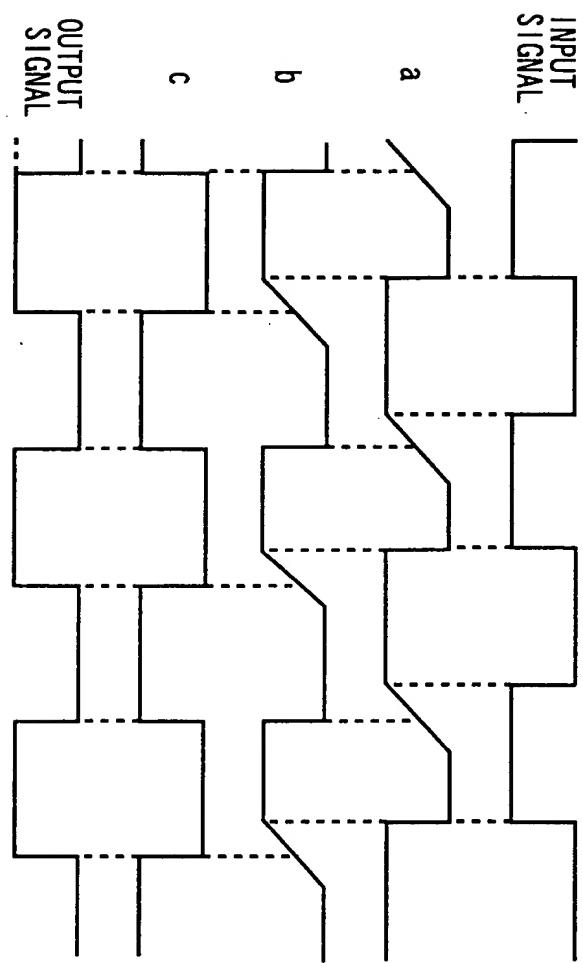
213c



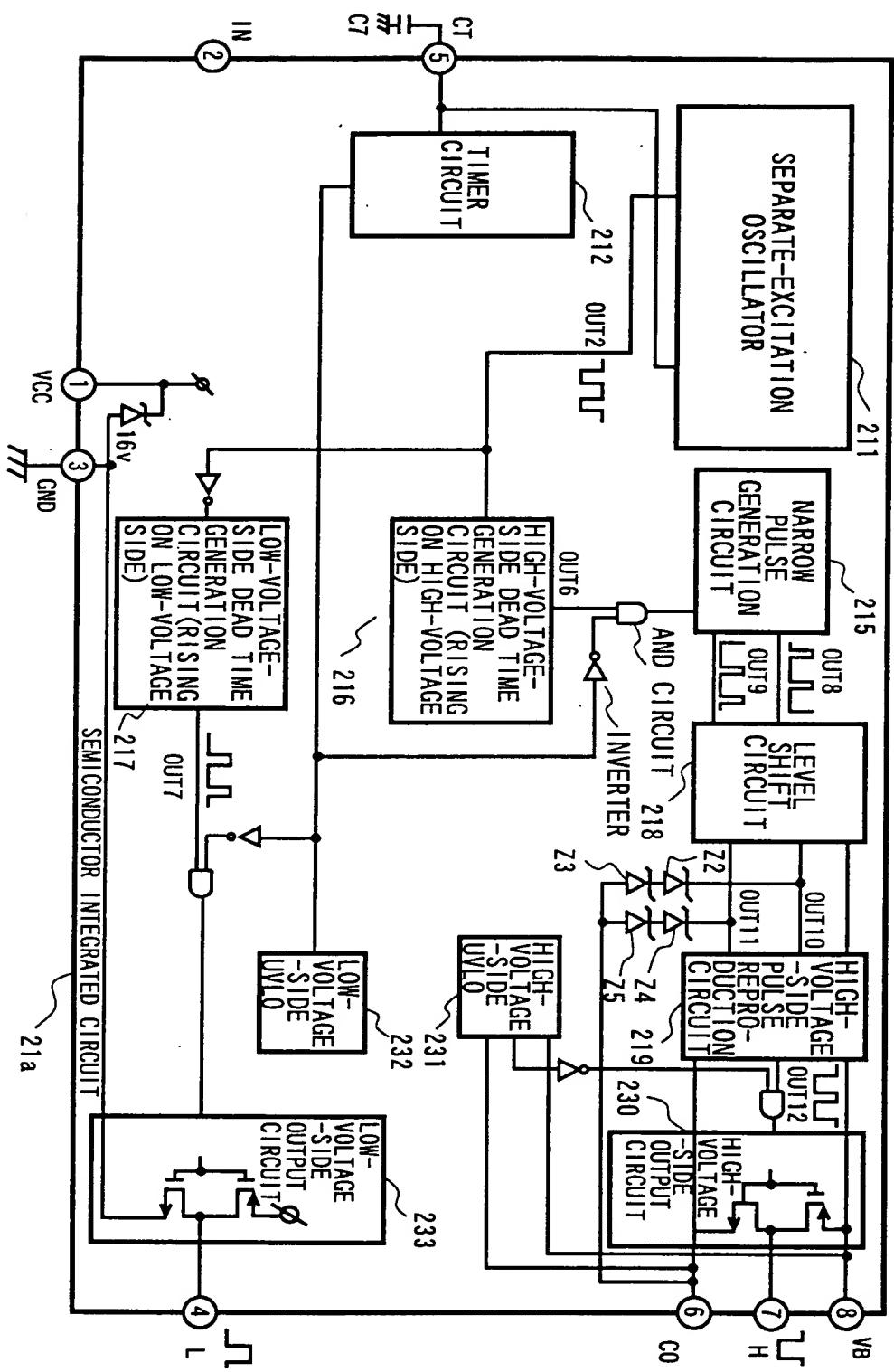
F I G. 2 9



F I G. 30



F I G. 3 1



OUTPUT FREQUENCY OF  
SEPARATE-EXCITATION  
OSCILLATOR

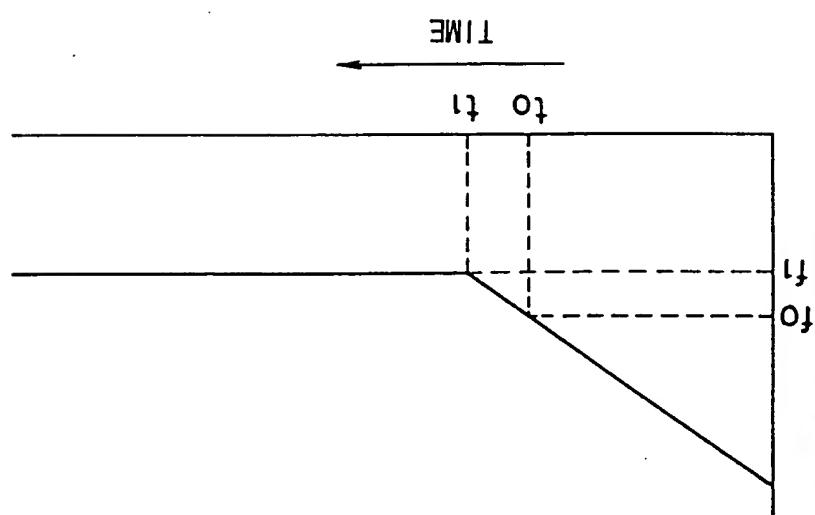
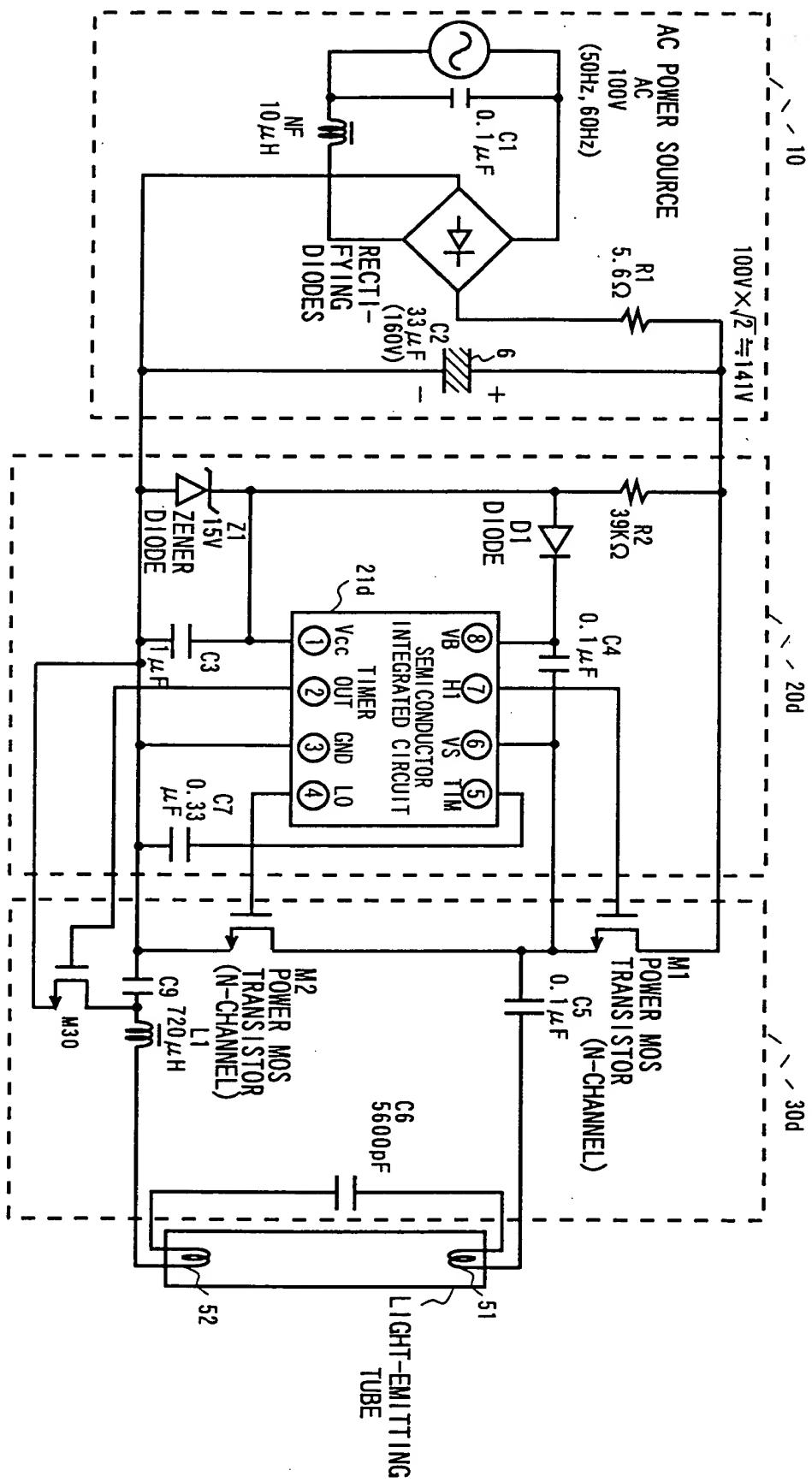
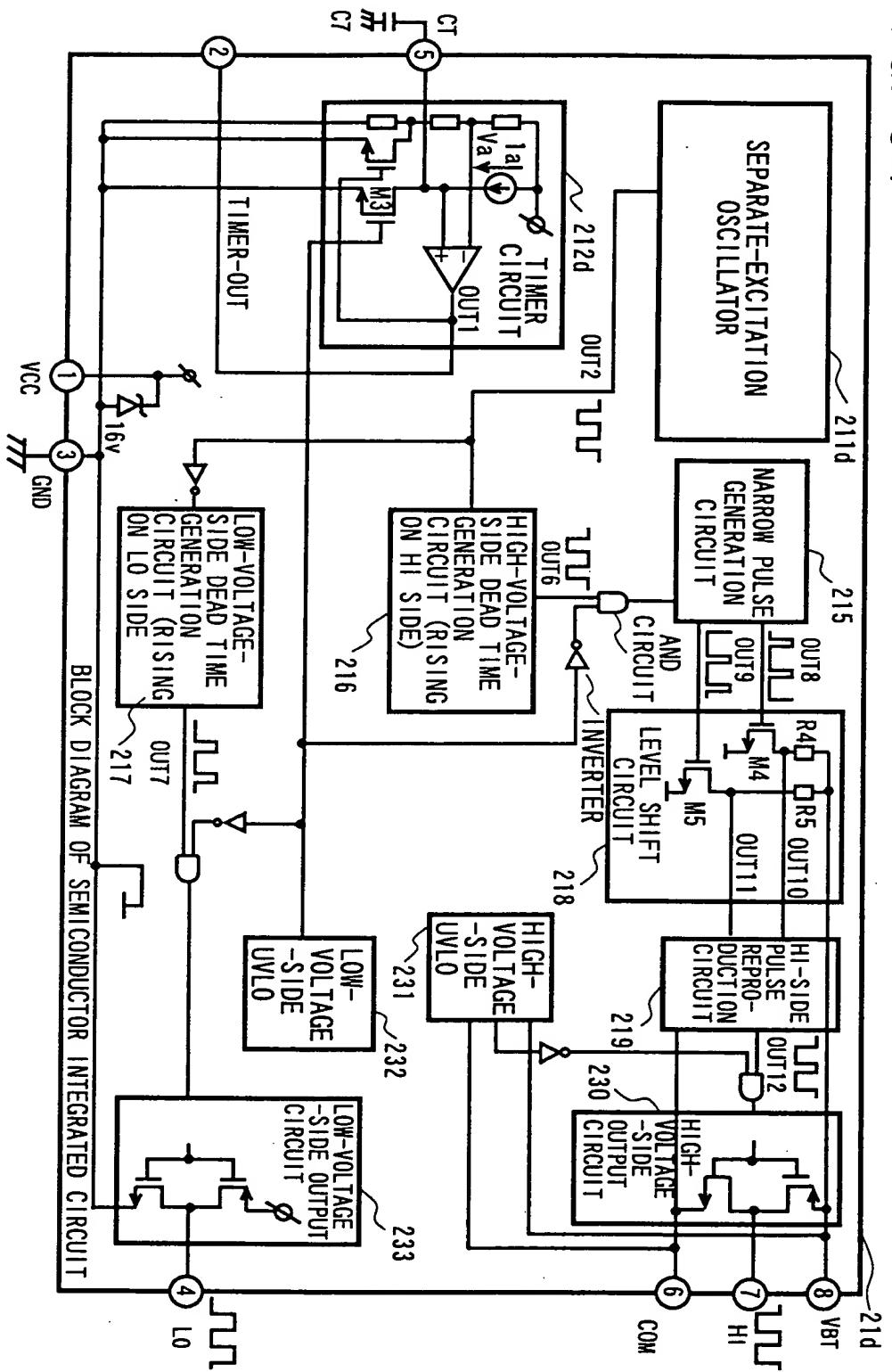


FIG. 32

F I G. 33



F I G. 3 4



F I G. 35

211d

V<sub>CC</sub>

V<sub>b</sub>

RESISTOR

COMPARATOR

P-CHANNEL

M<sub>6</sub> M<sub>7</sub> M<sub>8</sub> M<sub>9</sub>

SEPARATE-EXCITATION OSCILLATOR

S Q

R NQ

-

+

RS FLIP-FLOP

M<sub>10</sub> M<sub>11</sub>

N-CHANNEL

C<sub>8</sub>

NPN-Tr

R<sub>6</sub>

Q<sub>1</sub>

TO TIMER  
CIRCUIT

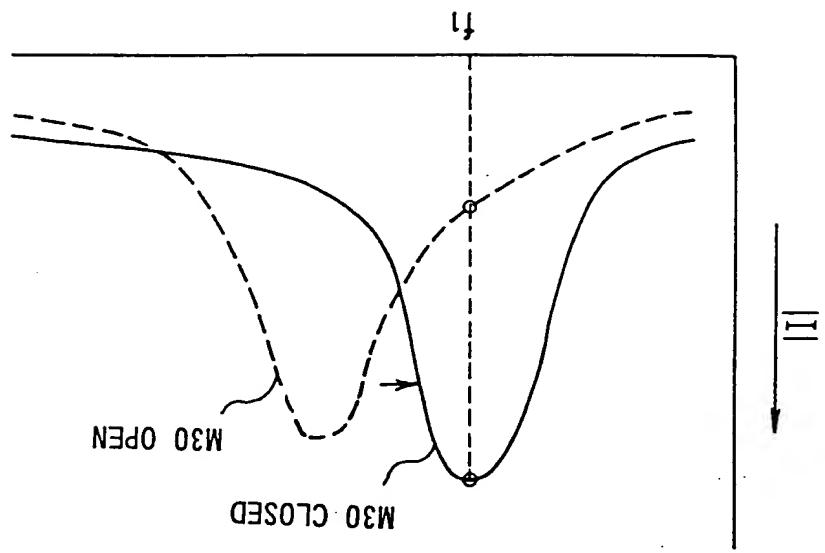
OUT2

$\overline{C}_7$

3

$\overline{C}_7$

5

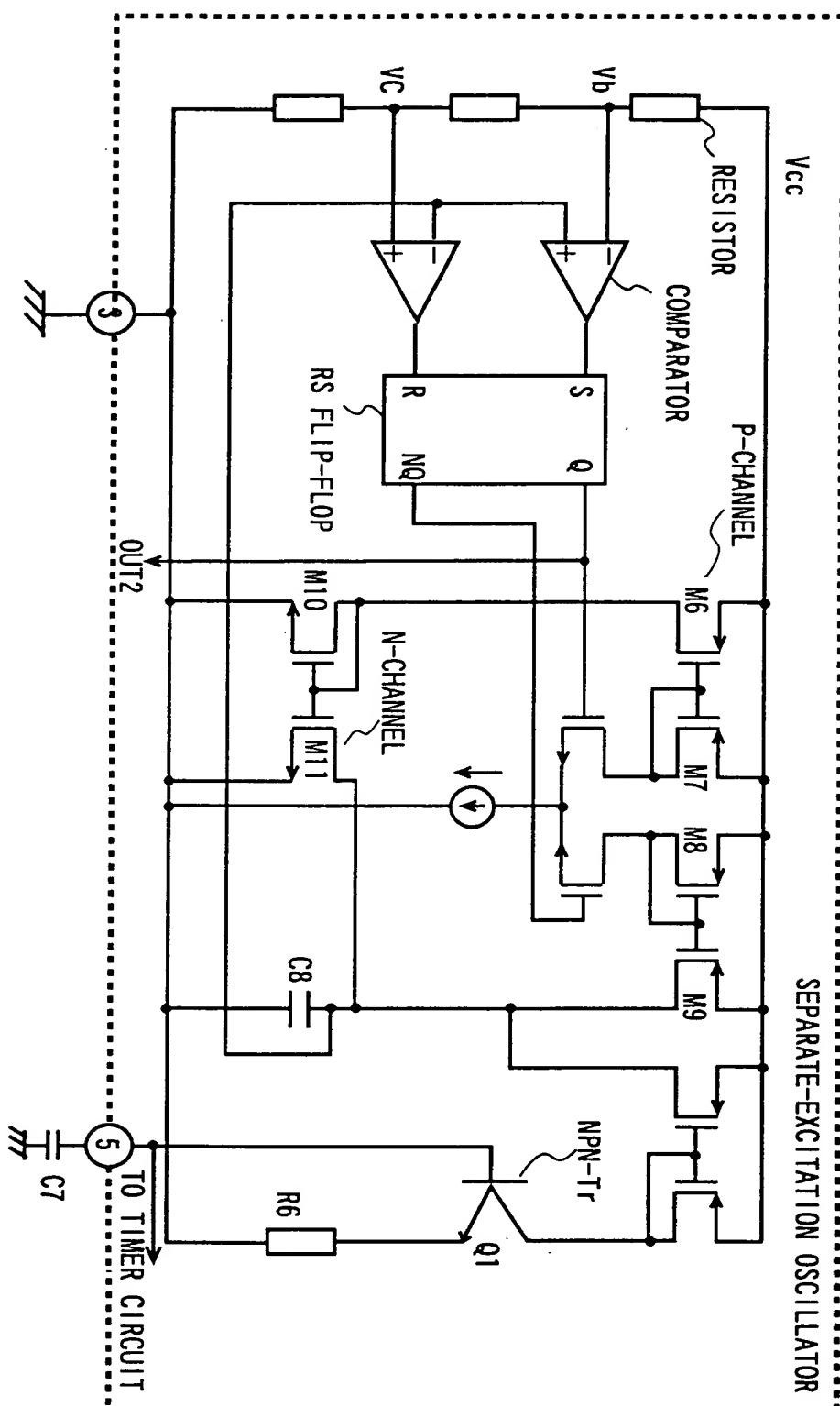


F I G. 3 6

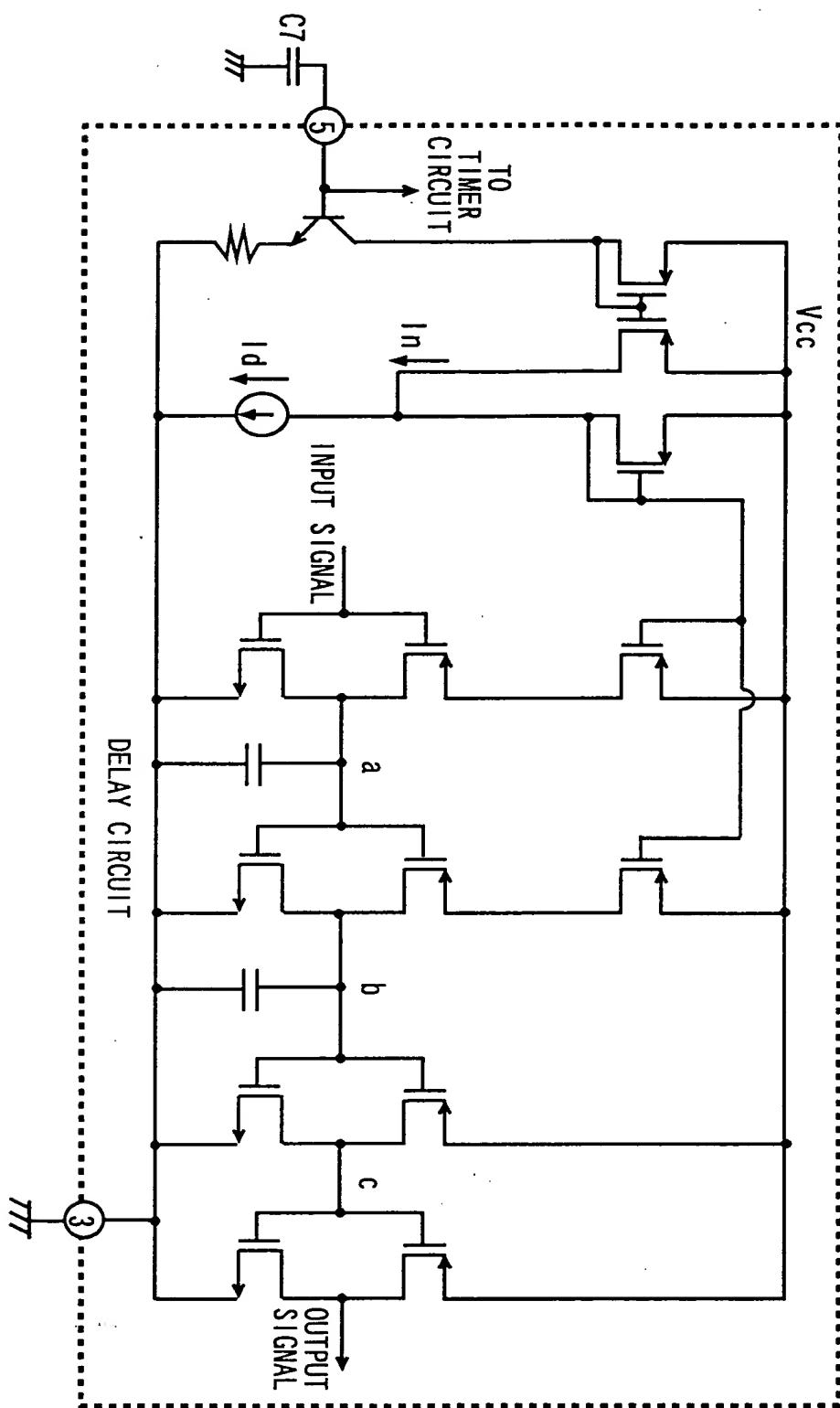
F I G. 37

211e

SEPARATE-EXCITATION OSCILLATOR



F I G. 3 8



F I G. 3 9

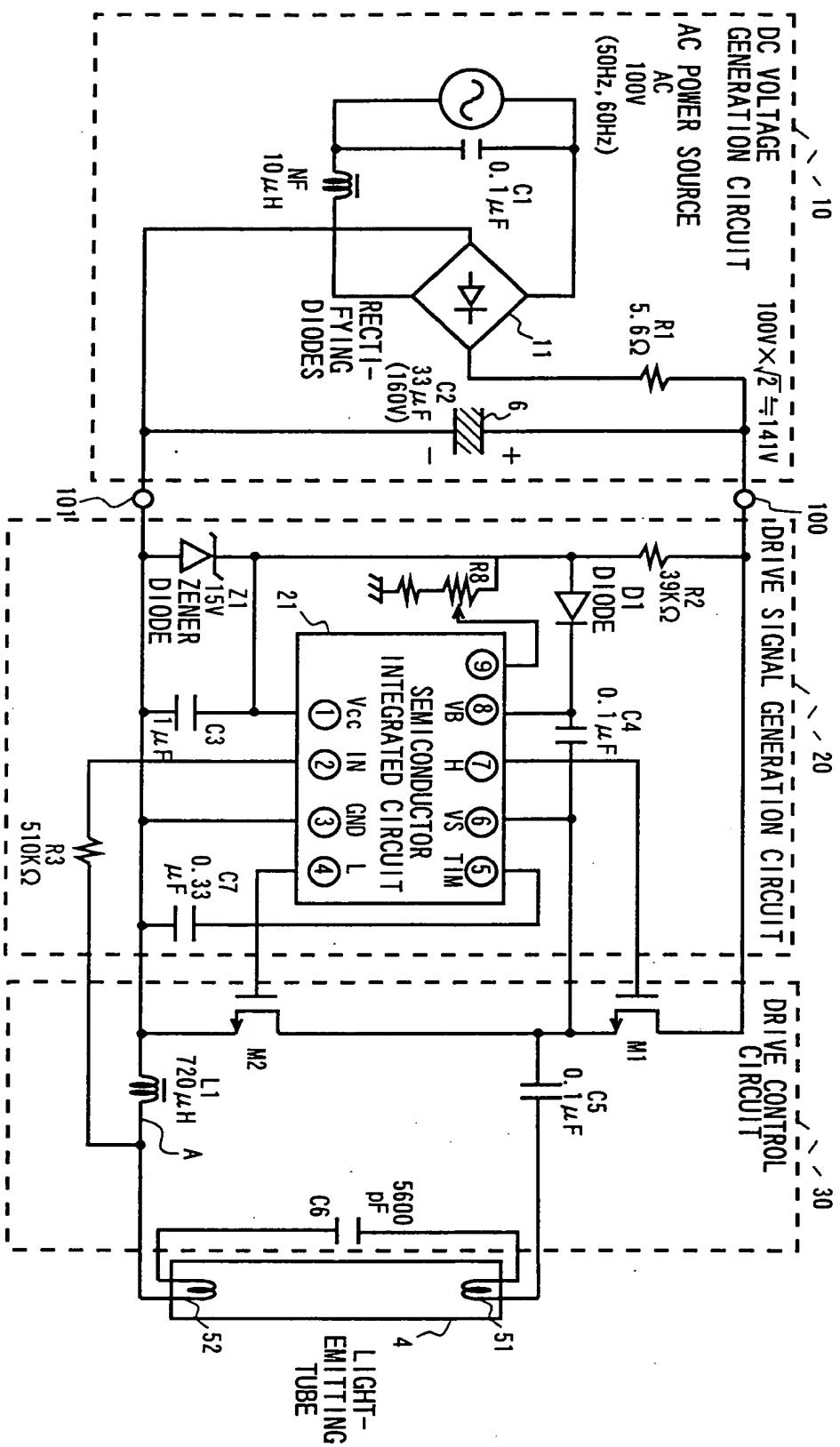
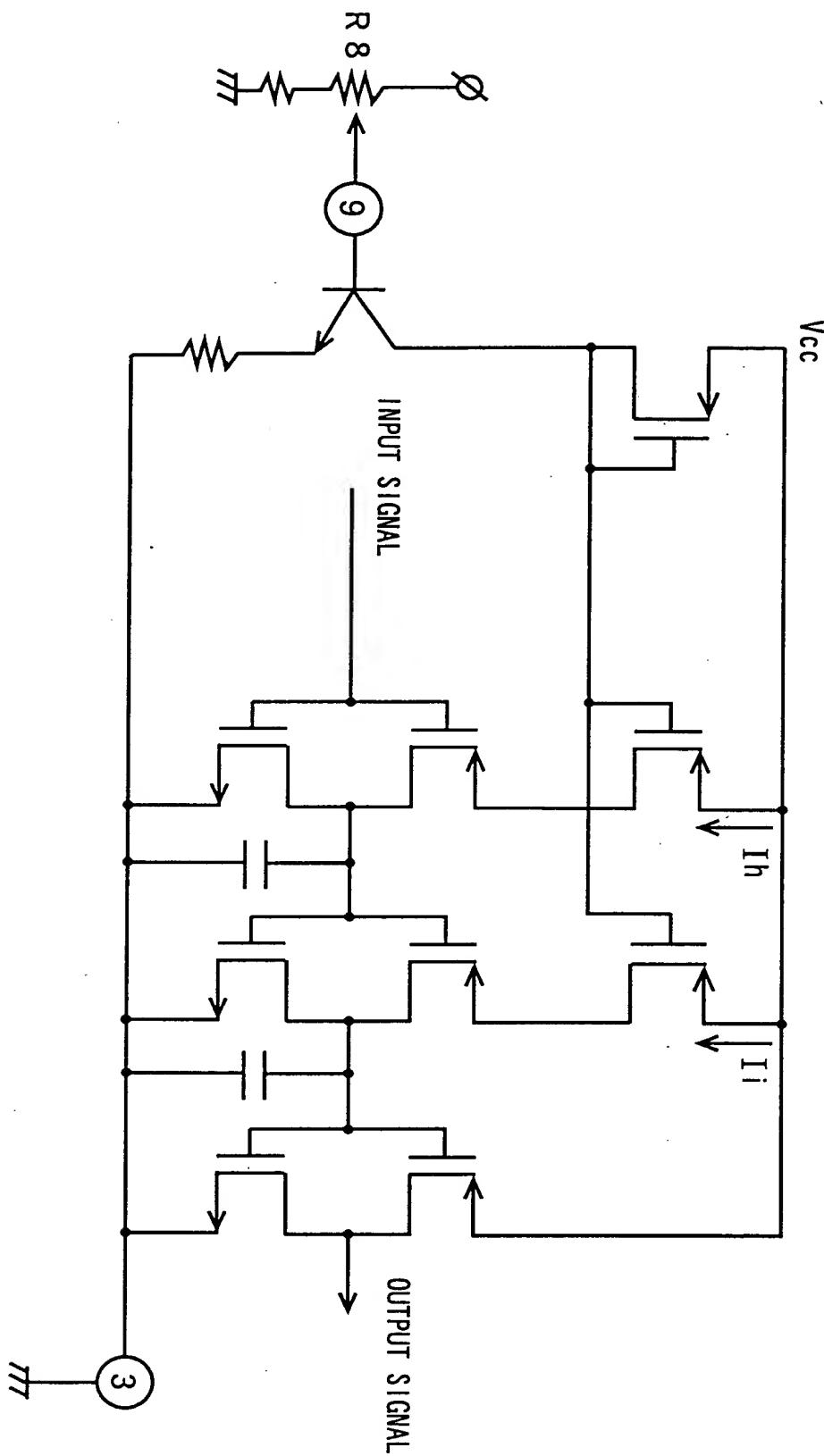


FIG. 40



F I G. 4 1

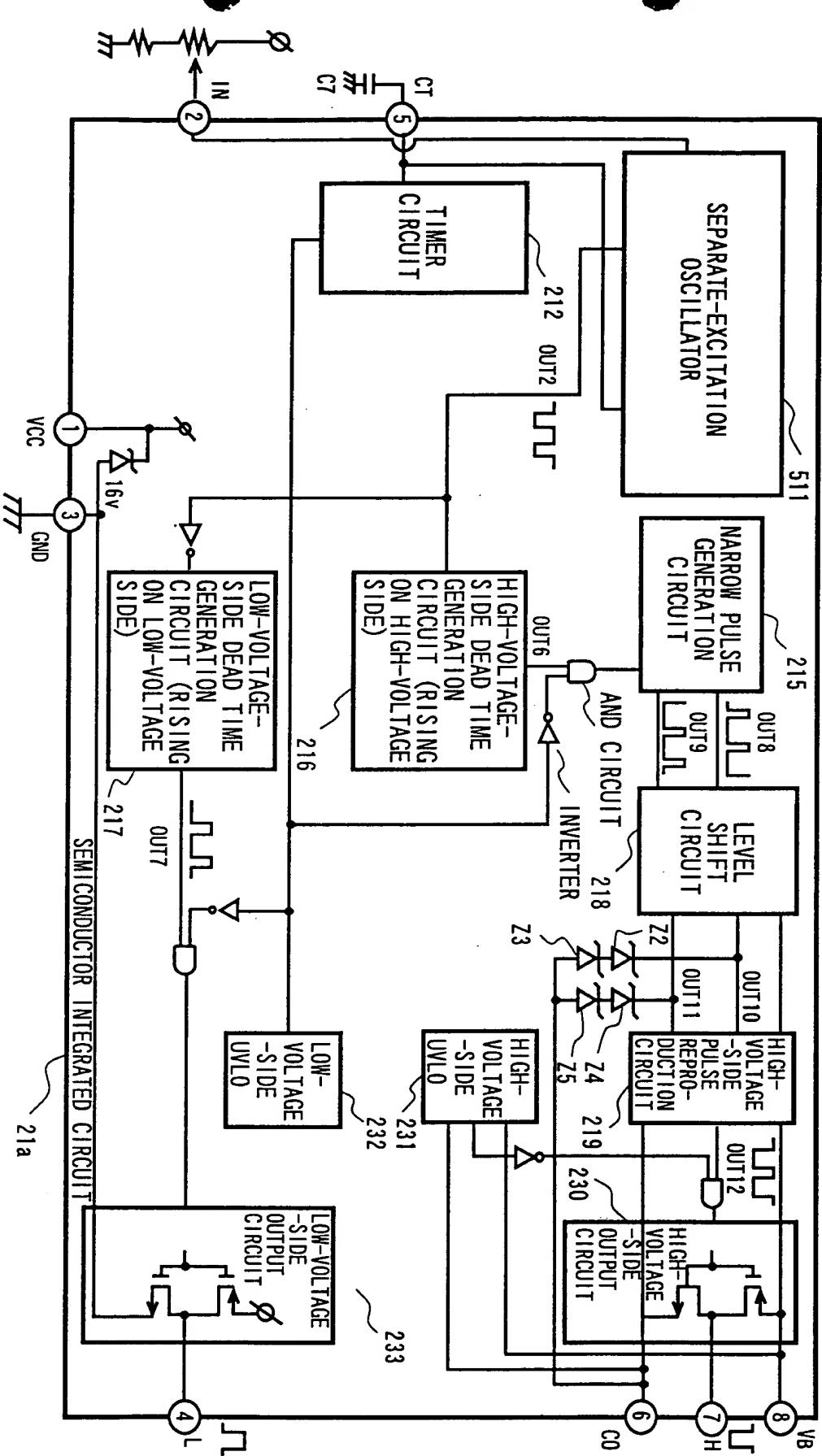
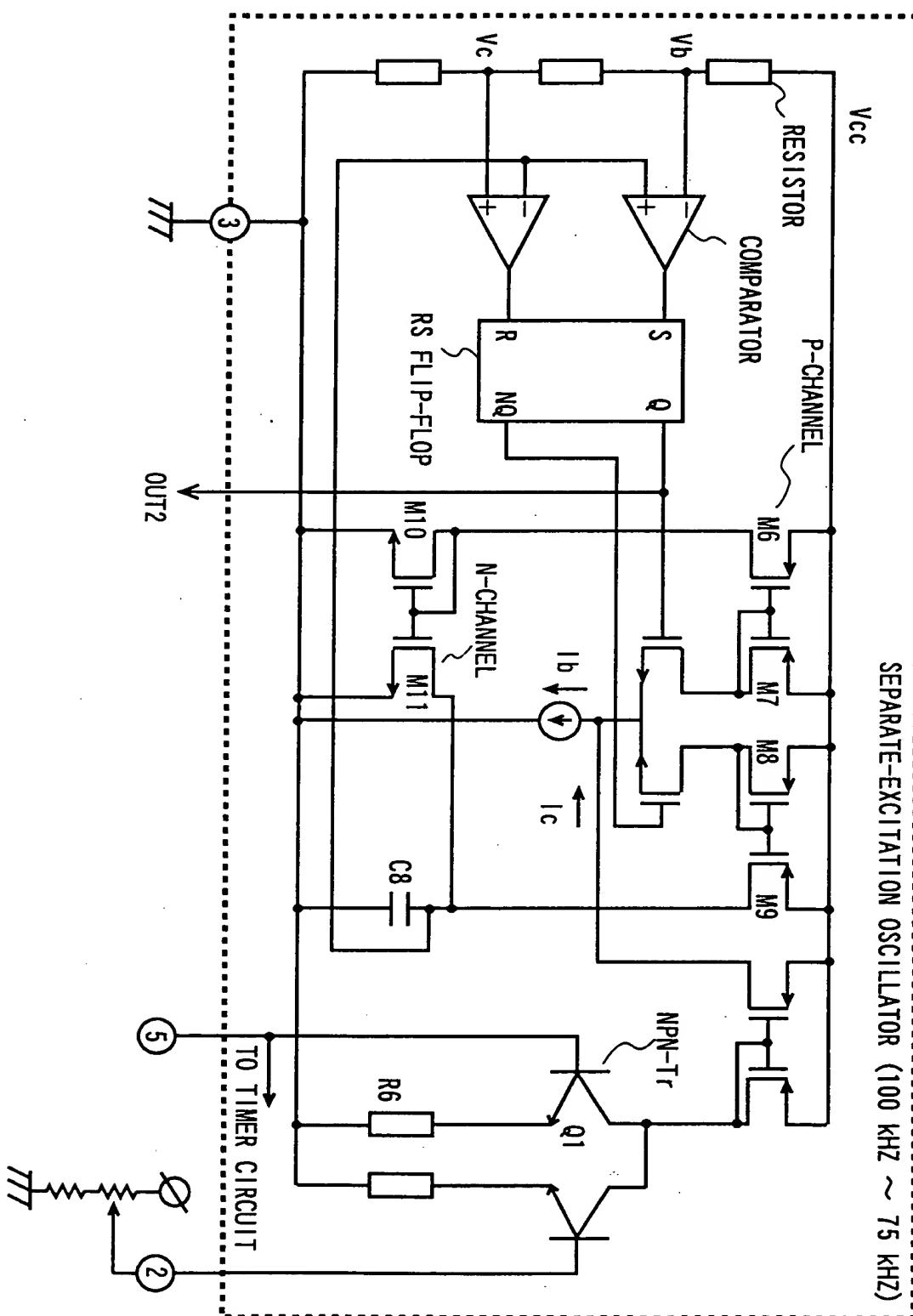


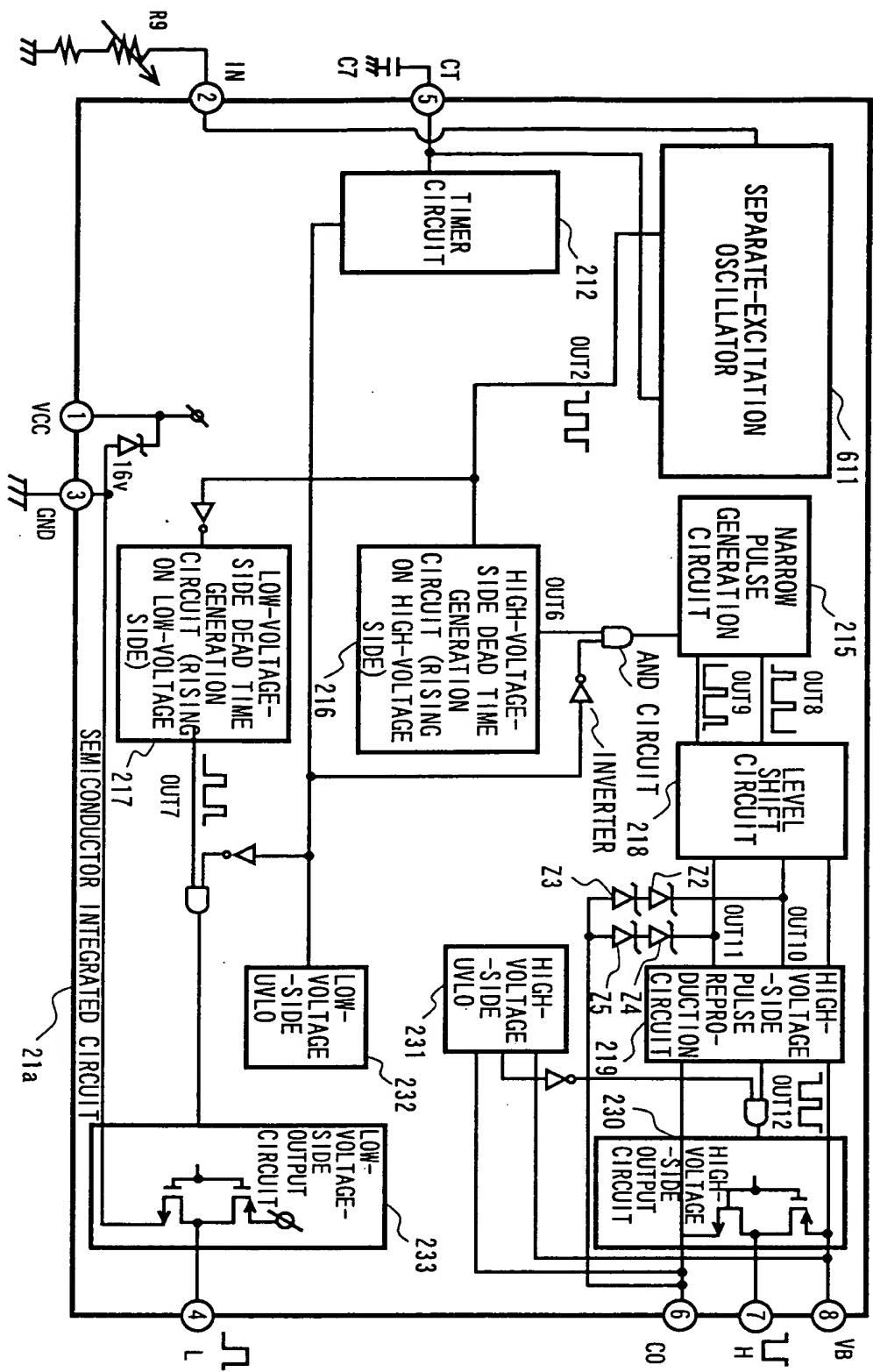
FIG. 42

51

## SEPARATE-EXCITATION OSCILLATOR (100 kHz ~ 75 kHz)



F | G. 4.3



F I G. 4 4

611

SEPARATE-EXCITATION OSCILLATOR (100 kHz ~ 75 kHz)

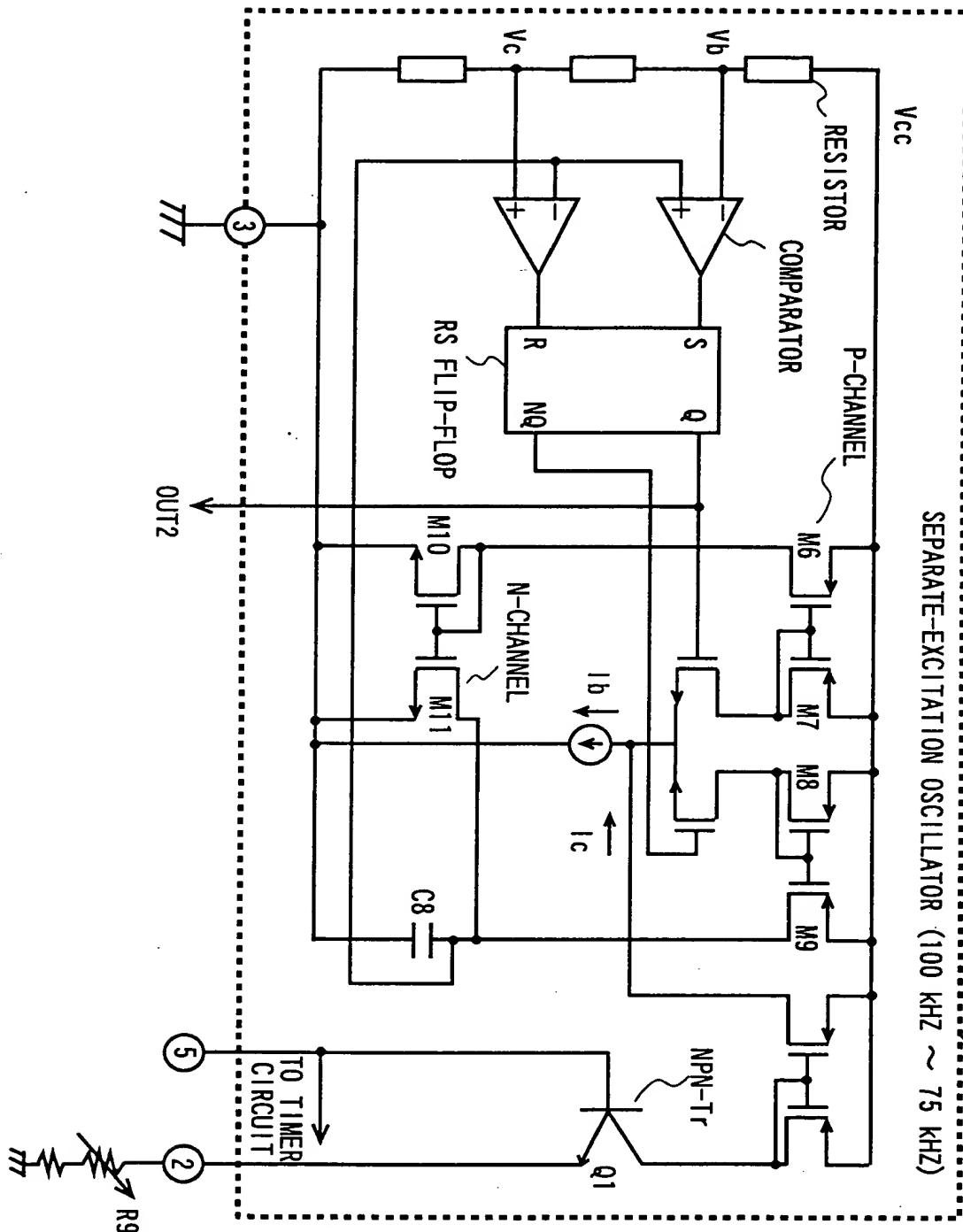


FIG. 45

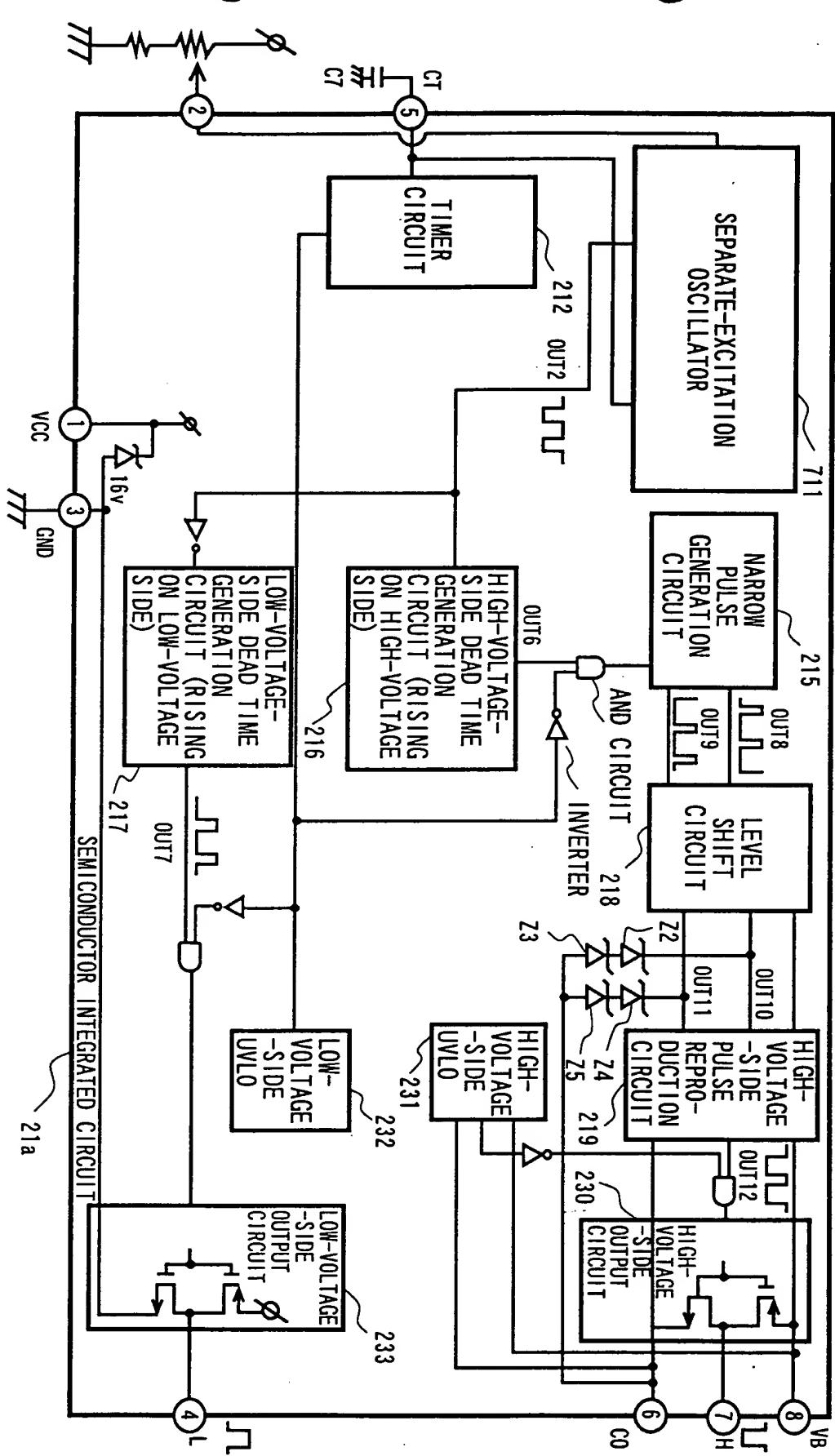
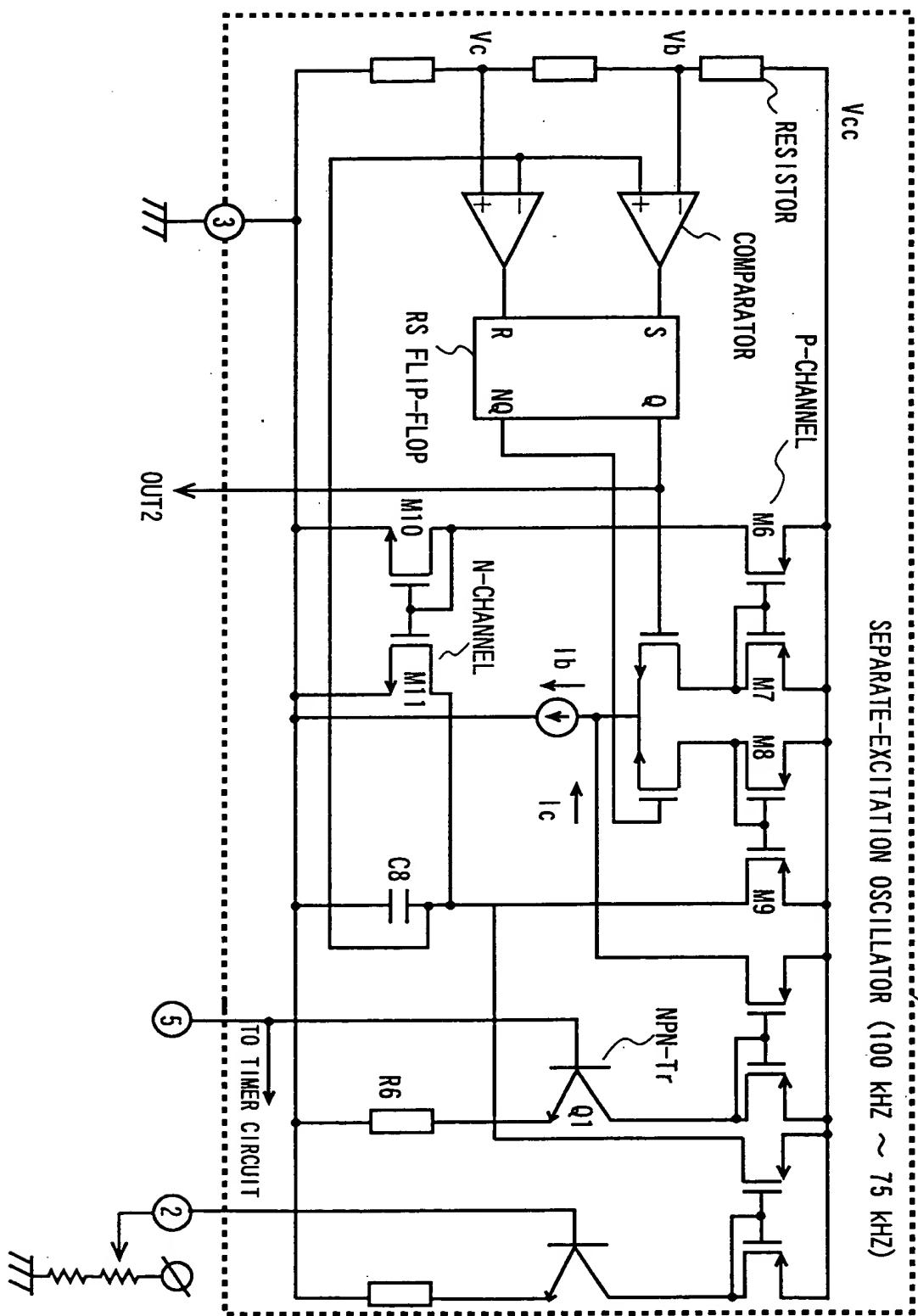


FIG. 46

二

## SEPARATE-EXCITATION OSCILLATOR (100 kHz ~ 75 kHz)



F I G. 47

PRIOR ART

